10/051,243

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: SSSPTA1600TXM

#### PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \* \* SESSION RESUMED IN FILE 'CAPLUS' AT 08:18:38 ON 25 AUG 2005 FILE 'CAPLUS' ENTERED AT 08:18:38 ON 25 AUG 2005 COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 8.91 332.21 => file registry COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 8.91 332.21

FILE 'REGISTRY' ENTERED AT 08:18:46 ON 25 AUG 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 AUG 2005 HIGHEST RN 861509-89-9 DICTIONARY FILE UPDATES: 23 AUG 2005 HIGHEST RN 861509-89-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

Uploading C:\Program Files\Stnexp\Queries\10051234b.str

### L11 STRUCTURE UPLOADED

=> d l11

L11 HAS NO ANSWERS

L11

STR

$$\begin{array}{c|c} H & \bigcirc \\ \hline \\ H & \longrightarrow \\ H & H \end{array}$$

G1 OH, [@1], [@2]

Structure attributes must be viewed using STN Express query preparation.

=> d his

L1

(FILE 'HOME' ENTERED AT 08:13:28 ON 25 AUG 2005)

FILE 'REGISTRY' ENTERED AT 08:13:38 ON 25 AUG 2005

STRUCTURE UPLOADED

L2 STRUCTURE UPLOADED

L3 101 S L1 FULL

L4 3 S L2 FULL

FILE 'CAPLUS' ENTERED AT 08:15:17 ON 25 AUG 2005

L5 198 S L3

L6 2 S L4

L7 2 S L5 AND GLUTAMATE

L8 0 S L5 AND VASOPROTECTIVE

L9 0 S L5 AND VASO

L10 11 S L5 AND BLOOD

FILE 'REGISTRY' ENTERED AT 08:18:46 ON 25 AUG 2005

L11 STRUCTURE UPLOADED

=> s l11 full

FULL SEARCH INITIATED 08:19:28 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 33759 TO ITERATE

SEARCH TIME: 00.00.01

L12 12 SEA SSS FUL L11

=> d scan 1-12

'1-12' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

L12 12 ANSWERS REGISTRY COPYRIGHT.2005 ACS on STN IN 1,2-Naphthalenedione, 2-oxime, cesium salt (9CI)

MF C10 H7 N O2 . Cs

● Cs

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN

SAM - Index Name, MF, and structure - no RN FIDE - All substance data, except sequence data

IDE - FIDE, but only 50 namesSQIDE - IDE, plus sequence data

SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used

SQD - Protein sequence data, includes RN

SQD3 - Same as SQD, but 3-letter amino acid codes are used SQN - Protein sequence name information, includes RN

CALC - Table of calculated properties EPROP - Table of experimental properties

PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract

APPS -- Application and Priority Information

BIB -- CA Accession Number, plus Bibliographic Data

CAN -- CA Accession Number

CBIB -- CA Accession Number, plus Bibliographic Data (compressed)

IND -- Index Data

IPC -- International Patent Classification

PATS -- PI, SO.

STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels

IBIB -- BIB, indented, with text labels

ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original)

OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields. HELP FORMATS -- To see detailed descriptions of the predefined formats. HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):11

REGISTRY COPYRIGHT 2005 ACS on STN L12 12 ANSWERS

1,2-Naphthalenedione, 2-oxime, lithium salt (2:1) (9CI) IN

MF C10 H7 N O2 . 1/2 Li

1/2 Li

REGISTRY COPYRIGHT 2005 ACS on STN L12 12 ANSWERS

1,2-Naphthalenedione, 2-oxime (9CI) IN

C10 H7 N O2 MF

CI COM

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L1212 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN 1,2-Naphthalenedione, 2-oxime, (2E)- (9CI) IN MF C10 H7 N O2

Double bond geometry as shown.

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L12 12 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Acetic acid, (1-oxo-2(1H)-naphthalenylidene)hydrazide (9CI)
MF C12 H10 N2 O2

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L12 12 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN IN 1,2-Naphthalenedione, 2-oxime, potassium salt (9CI) MF C10 H7 N O2 . K

#### K

L12 12 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN IN 1,2-Naphthoquinone, 2-oxime-d (6CI) MF C10 H6 D N O2

L12 12 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN IN 1,2-Naphthalenedione, 2-oxime, lithium salt (9CI) MF C10 H7 N O2 . Li

Li

L12 12 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,2-Naphthalenedione, 2-oxime, (2Z)- (9CI)

MF C10 H7 N O2

Double bond geometry as shown.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L12 12 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI)

MF C11 H9 N3 O2

CI COM

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L12 12 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,2-Naphthalenedione, 2-oxime, sodium salt (9CI)

MF C10 H7 N O2 . Na

Na

L12 12 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)-, compd. with sodium hydrogen sulfite (1:1) (9CI)

MF C11 H9 N3 O2 . H2 O3 S . Na

CM 1

CM 2

Na

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 161.76 493.97

FILE 'CAPLUS' ENTERED AT 08:20:05 ON 25 AUG 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching

databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 25 Aug 2005 VOL 143 ISS 9 FILE LAST UPDATED: 24 Aug 2005 (20050824/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

#### => d his

(FILE 'HOME' ENTERED AT 08:13:28 ON 25 AUG 2005)

FILE 'REGISTRY' ENTERED AT 08:13:38 ON 25 AUG 2005

L1 STRUCTURE UPLOADED

L2 STRUCTURE UPLOADED

L3 101 S L1 FULL L4 3 S L2 FULL

FILE 'CAPLUS' ENTERED AT 08:15:17 ON 25 AUG 2005

L5 198 S L3

L6 2 S L4

L7 2 S L5 AND GLUTAMATE

L8 0 S L5 AND VASOPROTECTIVE

L9 0 S L5 AND VASO L10 11 S L5 AND BLOOD

FILE 'REGISTRY' ENTERED AT 08:18:46 ON 25 AUG 2005

L11 STRUCTURE UPLOADED

L12 12 S L11 FULL

FILE 'CAPLUS' ENTERED AT 08:20:05 ON 25 AUG 2005

=> s 112 or 14

65 L12

2 L4

L13 65 L12 OR L4

=>

=> d fbib abs hitstr

L13 ANSWER 1 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:512880 CAPLUS

TI Nickel(II) complexes of naphthoquinone thiosemicarbazone and semicarbazone: Synthesis, structure, spectroscopy, and biological activity

AU Afrasiabi, Zahra; Sinn, Ekk; Lin, Weisheng; Ma, Yinfa; Campana, Charles; Padhye, Subhash

CS Department of Chemistry, University of Missouri-Rolla, Rolla, MO, 65409, USA

SO Journal of Inorganic Biochemistry (2005), 99(7), 1526-1531 CODEN: JIBIDJ; ISSN: 0162-0134

PB Elsevier B.V.

DT Journal

LA English

AB Ni(II) complexes of ortho-naphthoquinone thiosemicarbazone (NQTS) and semicarbazone (NQSC) were synthesized and spectroscopically characterized. The x-ray crystal structure of both the complexes, [Ni(NQTS)2]·2DMSO and [Ni(NQSC)2]·2DMSO·H2O, describe a distorted octahedral coordination with two tridentate mono-deprotonated

ligands. In vitro anticancer studies on MCF-7 human breast cancer cells reveal that the semicarbazone derivative along with its Ni complex is more active in the inhibition of cell proliferation than the thiosemicarbazone analogs.

IT 15687-37-3P

RL: BSU (Biological study, unclassified); ROT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(preparation, complexation with nickel(II), and antitumor activity against MCF-7 human breast cancer cells)

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT ,

=> d fbib abs hitstr 1-65 113

L13 ANSWER 1 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:512880 CAPLUS

TI Nickel(II) complexes of naphthoquinone thiosemicarbazone and semicarbazone: Synthesis, structure, spectroscopy, and biological activity

AU Afrasiabi, Zahra; Sinn, Ekk; Lin, Weisheng; Ma, Yinfa; Campana, Charles; Padhye, Subhash

CS Department of Chemistry, University of Missouri-Rolla, Rolla, MO, 65409, USA

SO Journal of Inorganic Biochemistry (2005), 99(7), 1526-1531 CODEN: JIBIDJ; ISSN: 0162-0134

PB Elsevier B.V.

DT Journal

LA English

AB Ni(II) complexes of ortho-naphthoquinone thiosemicarbazone (NQTS) and semicarbazone (NQSC) were synthesized and spectroscopically characterized. The x-ray crystal structure of both the complexes, [Ni(NQTS)2]·2DMSO and [Ni(NQSC)2]·2DMSO·H2O, describe a distorted octahedral coordination with two tridentate mono-deprotonated ligands. In vitro anticancer studies on MCF-7 human breast cancer cells reveal that the semicarbazone derivative along with its Ni complex is more active in the inhibition of cell proliferation than the thiosemicarbazone analogs.

IT 15687-37-3P

RL: BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(preparation, complexation with nickel(II), and antitumor activity against MCF-7 human breast/cancer cells)

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:485667 CAPLUS

TI Ligand-Based Virtual Screening and in Silico Design of New Antimalarial Compounds Using Nonstochastic and Stochastic Total and Atom-Type Quadratic Maps

AU Marrero-Ponce, Yovani; Iyarreta-Veitia, Maite; Montero-Torres, Alina; Romero-Zaldivar, Carlos; Brandt, Carlos A.; Avila, Priscilla E.; Kirchgatter, Karin; Machado, Yanetsy

CS Department of Pharmacy, Faculty of Chemical Pharmacy and Department of Drug Design, Chemical Bioactive Center, Central University of Las Villas, Santa Clara, Villa Clara, 54830, Cuba

SO Journal of Chemical Information and Modeling (2005), 45(4), 1082-1100 CODEN: JCISD8; ISSN: 1549-9596

PB American Chemical Society

DT Journal

LA English

Malaria has been one of the most significant public health problems for AB centuries. It affects many tropical and subtropical regions of the world. The increasing resistance of Plasmodium spp. to existing therapies has heightened alarms about malaria in the international health community. Nowadays, there is a pressing/need for identifying and developing new drug-based antimalarial therapies. In an effort to overcome this problem, the main purpose of this study is to develop simple linear discriminant-based quant. structure-activity relation (QSAR) models for the classification and prediction of antimalarial activity using some of the TOMOCOMD-CARDD (TOpol. Mol. COMputer Design-Computer Aided "Rational" Drug Design) fingerprints, to enable computational screening from virtual combinatorial datasets. In this sense, a database of 1562 organic chems. having great structural variability, 597 of them antimalarial agents and 965 compds. having other clin. uses, was analyzed and presented as a helpful tool, not only for theor. chemists but also for other researchers in this area. This seriles of compds. was processed by a k-means cluster anal. to design training and predicting sets. Afterward, two linear classification functions were derived to discriminate between antimalarial and nonantimalarial compds. The models (including nonstochastic and stochastic indexes) correctly classify more than 93% of the compound set, in both training and external prediction datasets. They showed high Matthews' correlation coeffs., 0.889 and 0.866 for the training set and 0.855 and 0.857 for the test one. The models' predictivity was also assessed and validated by the random removal of 10% of the compds. to form a new test set, for which predictions were made using the models. The overall means of the correct classification for this process (leave group 10% full-out cross validation) using the equations with nonstochastic and stochastic atom-based quadratic fingerprints were 93.93% and 92.77%, resp. The quadratic maps-based TOMOCOMD-CARDD approach implemented in this work was successfully compared with four of the most useful models for antimalarials selection reported to date. The developed models were then used in a simulation of a virtual search for Ras FTase (FTase = farnesyltransferase) inhibitors with antimalarial activity; 70% and 100% of the 10 inhibitors used in this virtual search were correctly classified, showing the ability of the models to identify new lead antimalarials. Finally, these two QSAR models were used in the

identification of previously unknown antimalarials. In this sense, three synthetic intermediaries of quinolinic compds. were evaluated as active/inactive ones using the developed models. The synthesis and biol. evaluation of these chems. against two malaria strains, using chloroquine as a reference, was performed. An accuracy of 100% with the theor. predictions was observed Compound 3 showed antimalarial activity, being the first report of an arylaminomethylenemalonate having such behavior. This result opens a door to a virtual study considering a higher variability of the structural core already evaluated, as well as of other chems. not included in this study. We conclude that the approach described here seems to be a promising QSAR tool for the mol. discovery of novel classes of antimalarial drugs, which may meet the dual challenges posed by drug-resistant parasites and the rapid progression of malaria illnesses.

IT 15687-37-3, Naftazone

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(ligand-based virtual screening and design of antimalarial compds.)

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-raphthalenylidene)- (9CI) (CA INDEX NAME)

RE.CNT 111 THERE ARE 111 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:244333 CAPLUS

DN 143:307

TI Atom, atom-type, and total nonstochastic and stochastic quadratic fingerprints: a promising approach for modeling of antibacterial activity

AU Marrero-Ponce, Yovani; Medina-Marrero, Ricardo; Torrens, Francisco; Martinez, Yamile; Romero-Zaldivar, Vicente; Castro, Eduardo A.

CS Department of Pharmacy, Faculty of Chemical-Pharmacy, Central University of Las Villas, Santa Clara, 54830, Cuba

SO Bioorganic & Medicinal Chemistry (2005), 13(8), 2881-2899 CODEN: BMECEP; ISSN: 0968-0896

PB Elsevier Ltd.

DT Journal

LA English

AB

The Topol. Mol. Computer Design (TOMOCOMD-CARDD) approach has been introduced for the classification and design of antimicrobial agents using computer-aided mol. design. For this propose, atom, atom-type, and total quadratic indexes have been generalized to codify chemical structure In this sense, stochastic quadratic indexes have been introduced for the description of the mol. structure. These stochastic fingerprints are based on a simple model for the intramol. movement of all valence-bond electrons. In this work, a complete data set containing 1006 antimicrobial agents is collected and presented. Two structure-based antibacterial activity classification models have been generated. The models (including nonstochastic and stochastic indexes) classify correctly more than 90% of 1525 compds. in training sets. These models permit the correct classification of 92.28% and 89.31% of 505 compds. in an external test sets. The approach, also, satisfactorily compares with respect to nine of the most useful models for antimicrobial selection reported to date. Finally, a virtual screening of 87 new compds. reported in the

the ability of the models to identify new leads as antibacterial. 15687-37-3, Naftazone RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)/ (atom, atom-type, and total nonstochastic and stochastic quadratic fingerprints as promising approach for modeling antibacterial activity) RN 15687-37-3 CAPLUS CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX RE.CNT 91 THERE ARE 91 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 4 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN L13 2005:79128 CAPLUS AN DN 142:280093 Oxazoles formation during O-alkylation of isonitroso-naphthols. X-ray ΤI structure of [1,2]naphthoquinone 1-[0-(4-tert-butyl-benzyl)-oxime] and 2-(4-tert-butyl-phenyl)naphth[1,2-d]oxazole ΑU Astolfi, Paola; Carloni, Patricia; Castagna, Riccardo; Greci, Lucedio; Rizzoli, Corrado; Stipa, Pierluigi CS Dipartimento di Scienze dei Materiali /e della Terra, Universita Politecnica delle Marche, Ancona, I-60131, Italy Journal of Heterocyclic Chemistry (2004), 41(6), 971-974 SO CODEN: JHTCAD; ISSN: 0022-152X PB HeteroCorporation DT Journal English LΑ CASREACT 142:280093 OS AB 1-Nitroso-2-naphthol and 2-nitroso-1-naphthol, both in the isonitroso form, react with benzyl bromi/des in THF and in the presence of triethylamine affording, in /low yields, the corresponding O-benzyl oximes and 2-aryl naphthoxazoles in a 1:1 ratio, approx. The structures of O-benzyl oximes and naphthoxazoles isolated have been determined by X-ray anal. IT 6373-60-0 RL: RCT (Reactant); RACT / (Reactant or reagent) (preparation of O-benzyl oximes and naphthoxazoles by reaction of nitrosonaphthols with benzyl bromides) RN6373-60-0 CAPLUS 1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME) CN THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 17

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

anti-infective field with antibacterial activities is developed showing

```
2004:202750 CAPLUS
AN
DN
     142:176723
     Product subclass 2: 1,2,4-triazines
TI
     Lindsley, C. W.; Layton, M. E.
ΑU
CS
SO
     Science of Synthesis (2004), 17, 357-447
     CODEN: SSCYJ9
     Georg Thieme Verlag
PB
DT
     Journal; General Review
     English
LΑ
     A review. Methods for preparing 1,2,4-triazines are reviewed including
AB
     cyclization, ring transformation, aromatization, and substituent
     modification.
IT
     308109-34-4
     RL: RCT (Reactant); RACT/(Reactant or reagent)
        (review preparation of triazines via cyclization, ring transformation,
        aromatization, and substituent modification)
RN
     308109-34-4 CAPLUS
CN
     1,2-Naphthalenedione, 2-oxime, (2E)- (9CI) (CA INDEX NAME)
Double bond geometry as/shown.
                  OH
              Ε
              THERE ARE 320 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
       320
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 6 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
     2002:137034 CAPLUS
AN
DN
    136:401365
     Nitroso-naphthol quinone-monooxime tautomeric equilibrium revisited:
TI
     evidence for oximo group isomerization
     Krzan, Andrej; Mavri, Janez
ΑU
     National Institute of Chemistry, Ljubljana, 1001, Slovenia
CS
     Chemical Physics (2002), 2/17(1), 71-76
SO
     CODEN: CMPHC2; ISSN: 0301-0104
PB
     Elsevier Science B.V.
DT
     Journal
LΑ
     English
     An ab initio and DFT treatment of the nitroso-naphthol/quinone-monooxime
AB
     tautomeric equilibrium revealed that the proton transfer process within the
     intramol. hydrogen bond cannot be responsible for the observed doubling of
     NMR signals. Our Anal. demonstrates that the barrier associated with
     geometric isomerization of the C:N bond is the likely cause of the signal
     doubling phenomenon. The conclusion of our study would suggest the need
     for re-interprefation of the dynamics in tautomeric equilibrium of this type.
     308109-33-3, 1/2-Naphthalenedione, 2-oxime, (2Z)-
ΙT
     308109-34-4, 1/2-Naphthalenedione, 2-oxime, (2E)-
     RL: CPS (Chemical process); PEP (Physical, engineering or chemical
     process); PRP (Properties); PYP (Physical process); PROC (Process)
        (ab initio study on nitroso-naphthol/quinone-monooxime tautomeric
        equilibrium)
RN
     308109-33-ß CAPLUS
     1,2-Naphthalenedione, 2-oxime, (2Z)- (9CI) (CA INDEX NAME)
CN
Double bond géometry as shown.
```

RN 308109-34-4 CAPLUS

CN 1,2-Naphthalenedione, 2-oxime, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RE.CNT 45 THERE ARE 45 CITED REFERENCES AYAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 65 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:177768 CAPLUS

DN 135:5292

TI Does tautomeric equilibrium exist/in ortho-nitrosonaphthols?

AU Ivanova, G.; Enchev, V.

CS Institute of Organic Chemistry, Bulgarian Academy of Sciences, Sofia, 1113, Bulg.

SO Chemical Physics (2001), 264 (3), 235-244 CODEN: CMPHC2; ISSN: 0301-01/04

PB Elsevier Science B.V.

DT Journal

LA English

The structure and conformational equilibrium of the monooximes of 1,2-naphthoquinone were studied by solid and liquid state NMR spectroscopy and non-empirical quartum-chemical calcns. According to the exptl. data and the ab initio (HF/6-1/G\*\* and MP4(SDTQ)/6-31G\*\*//6-31G\*\* levels) calcns. the compds. studied exist in the gas phase and in solution as oxime tautomers only. The relative stabilities of the above compds. in chloroform and dimethylsulfoxide solution are calculated within the polarizable continuum

model.

Solvent effects are found to change the relative stability of the syn- and anti-isomers of 1,2-naphthoquinone-2-oxime. The presence of syn- and anti-oxime isomers of 1,2-naphthoquinone-2-oxime and two rotameric forms of syn-1,2-naphthoquinone-1-oxime in solution is proved by NMR spectroscopy.

IT 6373-60-0, 1,2-Naphthoquinone-2-oxime

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(tautomeric equilibrium in ortho-nitrosonaphthols studied by NMR and ab initio methods)

RN 6373-60-0 / CAPLUS

CN 1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME)

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 8 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:88687 CAPLUS

DN . 134:274970

ΤI Synthesis, characterisation and electrochemical behaviour of rhodium(III) complexes containing 1,2-naphthogrinone-2-oxime and formation of imine complexes through N-O bond cleavage

ΑU Liu, Xiao-Xia; Wong, Wing-Tak

Department of Chemistry, The University of Hong Kong, Hong Kong, Hong Kong CS

European Journal of Inorganic Chemistry (2001), (2), 511-520 SO CODEN: EJICFO; ISSN: 1434-1/948

PB Wiley-VCH Verlag GmbH

DT Journal

LΑ English

OS CASREACT 134:274970

The new Rh(III) complexes [Rh( $\eta$ 2-nqo)L2Cl2] (1a-1d) and AB  $[Rh(\eta 2-nqo) 2LCl]$  (2b-2d) [1a, L = PPh3; 1b,2b, L = pyridine (py); 1c,2c, L = 4-phenylpyridine (ppy); 1d,2d, L = 4-acetylpyridine (apy)] were prepared by treatment of the reaction mixture of RhCl3·3H2O and 1,2-naphthoquinode-2-oxime (nqo) in EtOH by P or N donor ligands. Cyclic voltammetric stydies show that 1-2 display an irreversible metal-localized two-electron reduction from RhIII to RhI, accompanied by the loss of chloride ligands. The 1,2-naphthoquinone-2-imine (nqi) complexes  $[Rh(\eta 2-nqo)(\eta 2-nqi)Cl2] \cdot L (3b-3d) (3b, L = py; 3c, L = ppy;$ 3d, L = apy),  $[Rh(\eta 2-nqo)(\eta 2-nqi)Cl2]$  (4) and  $[Rh(\eta 2-nqo)2(nqi)Ql]$  (5) were obtained by deoxygenation of the oxime group in which N-O bond cleavage is observed The mol. structures of 1a, 2b, 4 and 5 were established by single crystal x-ray analyses.

IT**6373-60-0**, 1,2-Naphthoquinone-2-oxime

RL: RCT (Reactant); RACT (Reactant or reagent)

(for preparation of rhodium naphthoquinoneoxime complexes)

6373-60-0 CAPLUS RN

CN 1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME)

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 9 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

2001:63831 CAPLUS AN

DN 134:125960

Use of β-naphthoquinone derivatives for making medicines having an inhibiting effect on the release of glutamate by the brain

Israel, Maurice; Molgo, Jordi; Bloy, Christian; Mattei, Cesar Centre National de la Recherche Scientifique (C.N.R.S.), Fr. ΙN

PA

SO PCT Int. Appl., 22 pp. CODEN: PIXXD2

DT LA FAN.	Patent French CNT 1		7		/	
	PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
PI	WO 20010054 W: JP,		A1	20010125	WO 2000-FR2120	20000721
	•	BE, CH,	CY, DE	, DK, ES,	FI, FR, GB, GR, IE,	
	FR 2796552 EP 1196176 EP 1196176 R: AT, IE,	· · · · · · · · · · · · · · · · · · ·	A1 A1 B1 DE, DK	20010126 20020417 20040204 , ES, FR,	FR 1999-9469 FR 1999-9469 EP 2000-958596 GB, GR,/IT, LI, LU, FR 1999-9469	A 19990721 19990721 20000721 NL, SE, MC, PT, A 19990721
	JP 20035044	05	Т2	20030204	WO 2000-FR2120 JP 2001-510459 FR 1999-9469	W 20000721 20000721 A 19990721
	AT 268599		E	20040615	WO 2000-FR2120 AT 2000-958596 FR 1999-9469 WO 2000-FR2120	W 20000721 20000721 A 19990721 W 20000721
	PT 1196176		T	20040831/	PT 2000-958596 FR 1999-9469	20000721 A 19990721
	ES 2215716		Т3	20041016	ES 2000-958596 FR 1999-9469	20000721 A 19990721
	US 20021156	17	A1	20020/822	US 2002-51243 FR 1999-9469	20020122 A 19990721
	CA-2368850		AA	20030722	WO 2000-FR2120 CA 2002-2368850 FR 1999-9469	A2 20000721 20020122 A 19990721
GI	O NR		ØH O-	OH HO CO <sub>2</sub> H = NR	TR 1993 9409	A 13330721
	0 11 11					

AB  $\beta$ -Naphthoquinone derivs. are provided for making medicines with an inhibiting effect on the release of glutamate by the brain, the derivs. corresponding to I (R = NHCONH2, NHCOCH3, OH) and glucuronide derivs. II and their pharmaceutically acceptable acid addition salts. The invention is applicable to neurol. diseases.

# IT 6373-60-0 15687-37-3 51055-26-6 250585-74-1 321546-47-8 321546-48-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

 $(\beta\text{-naphthoquinone derivs.}$  for inhibiting release of glutamate in brain)

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

RN 51055-26-6 CAPLUS

CN Acetic acid, (1-oxo-2(1H)'-naphthalenylidene)hydrazide (9CI) (CA INDEX NAME)

RN 250585-74-1 CAPLUS

CN β-D-Glucopyranosiduronic acid, 2-[(aminocarbonyl)hydrazono]-1,2-dihydro-1-naphthalenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 321546-47-8 CAPLUS

CN β-Ď-Glucopyranosiduronic acid, 2-(acetylhydrazono)-1,2-dihydro-1-naphthalenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 321546-48-9 CAPLUS

CN β-D-Glucopyranosiduronic acid, 1,2-dihydro-2-(hydroxyimino)-1-naphthalenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 10 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:526316 CAPLUS

DN 134:4587

TI An ab initio molecular orbital study of nitrosophenol/quinone monooxime equilibria

AU Krzan, A.; Crist, D. R.; Horak, V.

CS National Institute of Chemistry, Ljubljana, 1000, Slovenia

SO THEOCHEM (2000), 528, 237-244 CODEN: THEODI, ISSN, 0166-1280

PB Elsevier Science B.V.

DT Journal

LA English

AB The nitrosopherol/quinone monooxime tautomeric equilibrium was studied by ab initio MO calchs. using the Hartree-Fock method at the 6-31G and 6-31G\* levels of theory. The 13 examined structures were based on benzene, naphthalene and phenanthrene ring systems with ortho and para substitution patterns of nitroso and hydroxy groups. Results show that the quinonoid form becomes increasingly favored with increasing ring system size. For

2-nitrosophenol and 1-nitroso-2-naphthol the phenolic forms are more stable by 10.3 and 0.5 kcal/mol, resp., but for 9.10-nitrosophenanthrol the quinonoid form is more stable by 4.6 kcal/mol. Also, with larger ring systems the geometries of both tautomeric forms/become increasingly similar. The most stable ortho structures possess an intramol. H-bond that appears to be stronger in quinonoid forms. Results of the calcns. are accordant with exptl. data.

IT 308109-33-3 308109-34-4

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(ab initio MO study of nitrosophenol/quinone monooxime equilibrium)

RN 308109-33-3 CAPLUS

CN 1,2-Naphthalenedione, 2-oxime, (2Z)-/(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 308109-34-4 CAPLUS

CN 1,2-Naphthalenedione, 2-oxime, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 11 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:445861 CAPLUS

DN 133:159218

TI Synthesis and spectral study of salts derived from quinone mono- and dioximes

AU Avdeenko, A. P.; Glinyanaya,/N. M.; Pirozhenko, V. V.

CS Donbass State Machine Building Academy, Donetskaya, 343913, Ukraine

SO Russian Journal of Organic/Chemistry (Translation of Zhurnal Organicheskoi Khimii) (1999), 35(10), 1480-1487
CODEN: RJOCEQ; ISSN: 1070-4280

PB MAIK Nauka/Interperiodica Publishing

DT Journal

LA English

AB Al, Zn, Cu(II), Ni(II), and alkali metal (Li, Na, K, and Cs) salts of 1,4-benzoquinone mono- and dioximes, 1,2-naphthoquinone 2-oximes, and 1,2-naphthoquinone/1-oximes were synthesized. According to the IR and 1H and 13C NMR spectral data, all the salts in the solid state exist in the quinone oxime form. The alkali metal salts in solution also exist in the quinone oxime form; some of them give rise to metallotropic Z,E-isomerization and o-quinone oxime-nitrosophenol tautomerism. Th authors conclude that the color of the quinone oxime salt is not related

. .

```
to a quinone oxime or nitrosophenol structure.
ΙT
     6373-60-0
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (metalation with alkali metal or transition metal)
RN
     6373-60-0 CAPLUS
     1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME)
CN
RE.CNT
        19
              THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 12 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     1999:575197 CAPLUS
DN
     131:208506
     Venous ulcer reappraisal. Insights from an International Task Force
ΤI
ΑU
     Clement, D. L.
     Dep. Cardiovascular Diseases, Univ. Ghent, Ghent, B-9000, Belg. Journal of Vascular Research (1999), 36(Suppl. 1), 42-47
CS
SO
     CODEN: JVREE9; ISSN: 1018-1172
PB
     S. Karger AG
DT
     Journal; General Review
LΑ
     English
AB
     A review with 25 refs., descrabing the insights of an International Task
     Force on the management of venous ulceration under the auspices of the
     VEINES (VEnous INsufficiency Epidemiol. and Economic Studies) Program.
     Treatment of ulcers is subdivided into medical therapy (systemic drugs and
     local therapies), compression therapy, and surgery in the Task Force
     document. Each mode of therapy is briefly discussed for both active and
     healed ulcers and recommendations from the Task Force are summarized.
ΙT
     15687-37-3, Naftazone
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (venous ulcer reappraisal)
     15687-37-3 CAPLUS
RN
CN
     Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
     NAME)
RE.CNT 25
              THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 13 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
     1999:520285 CAPLUS
AN
     131:346372
DN
TI
     Naftazone reduces glutamate cerebrospinal fluid levels in rats and
     glutamate release from mouse derebellum synaptosomes
AU
     Mattei, C.; Molgo, J.; Joseph, X.; Israe, M.; Bloy, C.
     Institute of Medical Sciences, Department of Biomedical Sciences,
     University of Aberdeen, Aberdeen, UK
```

SO Neuroscience Letters (1999), 271(3), 183-186 CODEN: NELED5; ISSN: 0304-3940

PB Elsevier Science Ireland Ltd.

DT Journal

LA English

AB It is well known that an excessive release of glutamate in the mammalian brain plays a major role in several neurol. diseases. Naftazone (Etioven®) is a currently used vasoprotectant drug that is metabolized in humans by reduction and glucuronidation. In the present study naftazone was found to decrease glutamate levels in the cerebrospinal fluid (CSF) of rats treated for 15 days, as determined by a chemiluminescent glutamate assay reaction. Naftazone and its glucuronide derivative also reduced resp. spontaneous and high K+-evoked glutamate release from mouse cerebellum synaptosomes. It is likely that naftazone and its glucuronide metabolite contribute in vivo to decrease glutamate levels in the CSF through their inhibitory actions on glutamate release.

IT 15687-37-3, Naftazone 250585-74-1

RL: BAC (Biological activity or effector; except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(naftazone reduces glutamate cerebrospinal fluid levels in rats and glutamate release from mouse cerebellum synaptosomes)

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2/(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

RN 250585-74-1 CAPLUS

CN β-D-Glucopyranosiduronic acid, 2-[(aminocarbonyl)hydrazono]-1,2-dihydro-1-naphthalenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 14 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:138226 CAPLUS

DN 130:320604

Effect of naftazone on in vivo platelet function in the rat

ΤI McGregor, L.; Chignier, E.; Bloy, C.; Rousselle, C.; Peltier-Pujol, F.; AU McGregor, J. L.

INSERM U331, R. T.H. Liennec Medical School, Lyon, 69003, Fr. CS

Platelets (1999), 10(1), 66-70 SO CODEN: PLTEEF; ISSN: 0953-7104

Carfax Publishing Ltd. PB

DT Journal

LА

The aim of this study was to investigate the in vivo effects of 50 mg/kg (i.p.) naftazone or ticlopidine on platelet functions in the rat. An AB automated isotope monitoring system (Aims plus) was used to determine the height of platelet aggregation and disaggregation (measured by the area under the curve, AUC) of 111indium-labeled platelets activated by ADP (10  $\mu g/kg$  i.v.) or collagen (50  $\mu g/kg$  i.v.). Fibrinogen-binding expts. were carried out with activated platelets in whole blood and measured by flow cytometry. Naftazone reduced the height of platelet aggregation induced by ADP compared with controls (P = 0.024). Ticlopidine-treated rats gave similar results (P/= 0.008). Platelet disaggregation, following the aggregation induced by collagen, was significantly increased in naftazone-treated rats compared with controls (P = 0.003). Similar results were observed with ticlopy dine-treated rats (P = 0.002). Fibrinogen binding to 2.5 or 5  $\mu M$  ADP-stimulated platelets, from naftazone-treated rats, were significantly reduced compared with controls (P = 0.05 and 0.04resp.). These results show that naftazone has similar inhibitory effects on rat platelet functions as ticloplidine. In conclusion, naftazone could be a useful agent to modulate platelet function in patients with cardiovascular disease.

15687-37-3, Naftazoné RL: BAC (Biological/activity or effector, except adverse); BSU (Biological IT study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(effect of naftazone on in vivo platelet function in the rat)

15687-37-3 CAPLUS

Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX RNCN

THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 24 ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 15 OF 65 CAPLUS COPYRIGHT 200% ACS on STN
```

KIND

1998:764270 CAPLUS ΑN

DN

Use of a pharmaceutical composition for treating and/or preventing ischemia and/or pathologies associ/ated with ischemia or with energy TT deficiency

Remacle, Jose; Michiels, Carine, IN

Belg. PA

PCT Int. Appl., 41 pp. SO CODEN: PIXXD2

DT Patent

French T.A

FAN.CNT 1 PATENT NO.

DATE

APPLICATION NO.

DATE

ΡI	WO 9851291	A1 19981119	WO 1998-BE67	19980512				
			CN, CU, CZ, DE, DE, E					
			LK, LR, LT, LV, MG, N					
			TR, TT, UA, US, UZ, V					
		MD, RU, TJ, TM	111, 11, 511, 52, 52,	,,,				
	· ·		UG, ZW, AT, BE, CH, C	TY. DE. DK. ES.				
			MC, NL, PT, SE, BF, E					
		ML, MR, NE, SN,	. ,	20, 01, 00, 01,				
	e., e., e.,	112, 1111, 112, 511,	BE 1997-415	A 19970513				
	BE 1011151	A3 19990504		19970513				
	CA 2287363	AA 19981119	/	19980512				
	ar 2207303	181 13301113	BE/1997-415	A 19970513				
			WO 1998-BE67	W 19980512				
	AU 9873272	A1 19981208	AU 1998-73272	19980512				
	, , , , , , ,	111 17701200	BE 1997-415	A 19970513				
			WO 1998-BE67	W 19980512				
	EP 981339	A1 20000301	EP 1998-920410	19980512				
		DE, DK, ES, FR	GB, GR, IT, LI, LU, N					
	, 52, 6,	22, 311, 22, 119	BE 1997-415	A 19970513				
		/	WO 1998-BE67	W 19980512				
	JP 2001526658	T2 20011218	JP 1998-548622	19980512				
•		/	BE 1997-415	`A 19970513				
			WO 1998-BE67	W 19980512				
	NO 9905500	A 19991110	NO 1999-5500	19991110				
·			BE 1997-415	A 19970513				
			WO 1998-BE67	W 19980512				
(	US 2002165270	A1 /20021107	US 2002-131921	20020423				
			BE 1997-415	A 19970513				
		/ .	WO 1998-BE67	W 19980512				
•		/	US 2000-423967	B1 20000320				
AB			pharmaceutical compos					
	suitable pharmaceutical carrier and an active compound selected among the							
	group consisting of $b$ ioflavonoids, rutin-garlic, troxerutin, coumarin,							
diagnin o (hydroxydthyl) myting gwoot glover and mytin extg								

diosmin, o-(-hydroxyethyl) rutins, sweet clover and rutin exts., tribenoside, methyl¢halcone hesperidin, Indian chestnut extract, naphtazone, esculoside, aescin/procyanidine oligomers, butcher's broom and methylchalcone hesperidine exts., ruscosides, common holly and black current exts., biIberry anthocyanin exts., the active principles of these compds. and/or a /mixture of them, acting on a patient's mitochondrial membrane protein/complexes, to prepare a medicine for treating and/or preventing ischemia and/or pathologies associated with ischemia or with energy deficiency.

IT 15687-37-3, Naftazone

RL: BAC (Biol $\phi$ gical activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(pharmaceutical composition for treating and/or preventing ischemia and/or pathologies associated with ischemia or with energy deficiency)

15687-37-3 / CAPLUS

RNHydrazinecárboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX CN NAME)

RE.CNT THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

# ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 16 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:206066 CAPLUS

DN 129:309

TI Acute and chronic haemodynamic effects of naftazone in portal hypertensive rats

AU Sogni, Philippe; Yang, Song; Pilette, Christophe; Moreau, Richard; Gadano, Adrian; Avenard, Gilles; Bloy, Christian; Lebrec, Didier

CS INSERM U-24, Lab. d'Hemodyn. Splanchnique et de Biol. Vasculaire, Hop. Beaujon, Clichy, 92118, Fr.

SO European Journal of Pharmacology (1998), 344(1), 37-43 CODEN: EJPHAZ; ISSN: 0014-2999

PB Elsevier Science B.V.

DT Journal

LA English

It has been demonstrated that hyperprodn. of nitric oxide (NO) plays a AB major role in the vasodilation of cirrhosis; thus, the vasodilation might be reversed by an inhibition of NO production Exptl. studies in isolated aortic rings showed that naftazone inhibits the effects of NO production The aim of this study was to evaluate the hemodynamic effects of acute and chronic administration of naftazone in rats with portal hypertension. Hemodynamic values were measured either before and 10 min after i.v. administration of 432 µg/kg of naftazone or after 4 days of oral administration of 10 mg/kg per day. Acute administration of naftazone significantly reduced portal pressure in portal vein-stenosed and cirrhotic rats. This reduction was related to a decrease in the resistance of the liver and collateral circulation and it was associated with an increased cardiac output. Oral administration of naftazone significantly decreased portal pressure in rats with portal vein stenosis; this decrease depended on a significant reduction of portal blood flow. In both groups, arterial pressure did not change significantly. These hemodynamic effects differed from those observed following prazosin or propranolol administration. However, these effects were similar but less marked than those observed following N-nitro-L-arginine administration in systemic and splanchnic arterial territories. In conclusion, acute and oral administration of naftazone significantly reduces portal pressure by two different mechanisms in portal hypertensive rats. The exact mechanism has, however, to be elucidated.

IT 15687-37-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(acute and chronic hemodynamic effects of naftazone in portal hypertensive rats)

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

$$N-NH-C-NH_2$$

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 17 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:481379 CAPLUS

DN 125:158159

TI In-vitro and ex-vivo inhibition of blood platelet aggregation naftazone

AU Durand, P.; Bloy, C.; Peltier-Pujol, F.; Blache, D.

CS Laboratoire de Biochemie des Lipoproteines, Universite de Bourgogne, Dijon, 21033, Fr.

SO Journal of Pharmacy and Pharmacology (1996), 48(6), 566-572 CODEN: JPPMAB; ISSN: 0022-3573

PB Royal Pharmaceutical Society of Great Britain

DT Journal

LA English

AB Because of the considerable interest in the role of platelets and antiplatelet therapy in cardiovascular disease, including the aggregation of platelets of each other during arterial thrombosis and atherogenesis, the authors have studied the effect of naftazone (Etioven), an original vasculotropic drug on platelet aggregation. Rat and human platelets were prepared and incubated in-vitro with different concns. of naftazone. The authors found that naftazone inhibited both platelet secretion and aggregation in platelet-rich plasma (PRP) and washed platelets after stimulation with thrombin or ADP. Rats were also treated i.p. for five days with various naftazone doses (0.125-10 mg kg-1) and ex-vivo platelet aggregation compared, at various times after the last injection, with that of control animals. Inhibition by naftazone was dose-dependent in both PRP and isolated platelets. The inhibition was transient, a maximum value (.apprx.50%) being obtained about 3-6 h after the last injection, with a return to near-control values after 24 h. Naftazone also facilitated platelet deaggregation after in-vitro stimulation with thrombin or ADP. In another series of expts., rats were treated i.p. for five days with 10 mg kg-1 of aspirin, ticlopidine, dipyridamole or naftazone. Platelets were prepared and tested for aggregation 90 min after the last injection. Thrombin-induced aggregation in PRP and washed platelets was significantly reduced after in-vivo treatment with ticlopidine and naftazone. Except for dipyridamole, all the drugs inhibited ex-vivo ADP-induced aggregation in PRP. In isolated platelet preparation, only naftazone induced a significant inhibition of ADP- or thrombin-stimulated aggregation. The authors conclude that naftazone inhibits platelet aggregation in-vitro and ex-vivo.

T 15687-37-3, Naftazone

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(in-vitro and ex-vivo inhibition of blood platelet aggregation naftazone with human and laboratory animal platelets)

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

L13 ANSWER 18 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:232753 CAPLUS

DN 124:306864

II Lipid peroxidation and lysosomal integrity in different inflammatory models in rats: the effects of indomethacin and naftazone

AU Agha, Azza M.; Gad, Mohamed Z.

CS Faculty of Pharmacy, Cairo University, Cairo, Egypt

SO Pharmacological Research (1995), 32(5), 279-85

CODEN: PHMREP; ISSN: 1043-6618

PB Academic DT Journal LA English

AB In the present study, the potential involvement of lipid peroxidn. and disruption of lysosomal integrity in the pathogenesis of different exptl. models of inflammation was examined The chosen models were carrageenan-induced paw edema, carrageenan granuloma pouch (acute phase) and Freund's adjuvant-induced arthritis in rats. The pharmacol. and biochem. effects of naftazone, a lysosomal membrane stabilizer and indomethacin, a standard anti-inflammatory agent were evaluated with regard to paw edema volume, serum and exudate activities of the lysosomal enzyme N-acetyl- $\beta$ -D-glucosaminidase (NAG), in addition to serum and liver lipid peroxide (LP) levels. I.p. administration of the test drugs, in rats subjected to inflammation, produced: (1) a significant inhibition of carrageenan-induced paw edema, (2) a marked reduction of the paw edema of the Freund's adjuvant arthritic animals, (3) a remarkable decrease of lysosomal leakage of NAG into the exudate of carrageenan granuloma pouch, (4) a slight, but significant, reduction of NAG activity in the serum of rats subjected to carrageenan inflammation, and (5) a reduction of the serum level of LP that was elevated in adjuvant-induced arthritic rats. The level of liver LP was altered by either drugs in an opposite manner; while naftazone lowered hepatic LP, indomethacin markedly elevated its level. The results of the present investigation revealed that lipid peroxidn. and disruption of lysosomal integrity are implicated in the pathogenesis of inflammatory processes, and the protection against these deleterious effects imparted both drugs significant anti-inflammatory activity.

15687-37-3, Naftazone RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(lipid peroxidn. and lysosomal integrity in different inflammatory models in rats and effects of indomethacin and naftazone)

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

L13 ANSWER 19 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:21087 CAPLUS

DN 124:134673

TI Reduction and glucuronidation of naftazone by human and rat liver microsomes

AU Herber, Regine; Hercelin, Bernard; Van Cantfort, Jacques; De Graeve, Jean; Fournel-Gigleux, Sylvie; Taguzhi, Tadao; Magdalou, Jacques

CS Centre du Medicament, Nancy, 54000, Fr.

SO Drug Metabolism and Disposition (1995), 23(12), 1305-14 CODEN: DMDSAI; ISSN: 0090-9556

PB Williams & Wilkins

DT Journal

LA English

AB Reduction and glucuronidation of the vasoprotectant drug, naftazone, by human and rat liver microsomes and by recombinant UDP-glucuronosyltransferases (UGT) stably expressed in V79 in V79 cells were studied. The oxo group

was first reduced in the presence of NADPH or NADH, and was subsequently readily glucuronidated on the phenolic moiety leading to a  $1\beta$ - $\omega$ -glucuronide, as revealed from MS and by proton and 13C-NMR. Glucuronide extracted from the urine of rats treated with the drug presented the same structure. In all enzyme systems tested, NADH was the most efficient electron donor, when compared with NADPH. The reaction was strongly inhibited by quercitin, a specific inhibitor of carbonyl reductase. Attempts to isolate the reduced intermediate were unsuccessful because of its marked instability. In humans, a /large interindividual variation for the formation of glucuronide was observed with microsomes of seven different liver samples (3.98 ± 3.22 nmg1/min . mg). In rat, glucuronidation of reduced naftazone was strongly induced (12-fold) by 3-methylcholanthrene and, to a lesser extent (2,6-fold) by phenobarbital, but was not affected by clofibrate. In addition, liver microsomes from Gunn rats, which present a genetic defect in bilirubin and phenol UGTs could not form glucuronide of reduced naftazone. The drug, after addition of NADH, was a substrate of the human liver recombinant UGT1\*6 that presents a strict specificity toward planar pheńolic substances, but not that of UGT2B4 and UGT2B1 expressed in V79/fibroblasts. The reducing step by the endogenous V79 cellular reductase/was rate-limiting. In conclusion, the powerful inducing effect exerted by 3-methylcholanthrene, the lack of glucuronidation in the Gunn rat and the ability of UGT1\*6 encoded by the UGT1 gene to glucuronidate reduced naftazone suggest that, in humans and in the rat, the compound is métabolized by a UGT isoform (UGT\*6 and the rat orthologous form) belonging to family 1, with a restricted specificity toward the drug.

IT 15687-37-3, Naftazone

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROG (Process)

(reduction and glucuronidation of naftazone by human and rat liver microsomes)

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

L13 ANSWER 20 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:802579 CAPLUS

DN 123:246368

TI Naftazone accelerates human saphenous vein endothelial cell proliferation in vitro

AU Klein-Soyer, C; Bloy, C; Archipoff, G; Beretz, A; Cazenave, J-P

CS Etablissement de Transfusion Sanguine, Strasbourg, F-67065, Fr.

SO Nouvelle Revue Française d'Hematologie (1995), 37(3), 187-92 CODEN: NRFHA4; ISSN: 0029-4810

PB Springer-Verlag France

DT Journal

LA English

AB Naftazone accelerated human saphenous vein endothelial cell proliferation in vitro at concns. which did not alter the hemostatic balance, resulting in a cell d. at confluence 20% higher than in controls. This compound was able to partially substitute for serum requirements and further displayed additive effects in the presence of fibroblast growth factors. Thus, naftazone, an original synthetic mol. distinct from growth factor

peptides, is a promising candidate drug for the amelioration of vascular repair.

IT 15687-37-3, Naftazone

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(human saphenous vein endothelial cell proliferation acceleration by)

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

L13 ANSWER 21 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:752270 CAPLUS

DN 123:218015

TI Fungal metabolite of naftazone inhibits nitrite production by activated murine macrophages

AU Ouazzani, J.; Servy, C.; Bloy, C.; Ducrocq, C.

CS Inst. Chim. Substances Naturelles, CNRS, Gif-sur-Yvette, 91198, Fr.

SO Bioorganic & Medicinal Chemistry Letters (1995), 5(16), 1825-8 CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier

DT Journal

LA English

OS CASREACT 123:218015

AB The fungus Mucor plumbeus catalyzes the enzymic cyclization of naftazone to naphtho-(1,2-e)-(1,2,4)-triazine-(3H)-one. This compound inhibits the induction and the activity of NO synthase by activated murine peritoneal macrophages.

IT **15687-37-3**, Naftazone

RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent)

(fungal metabolite of naftazone inhibits nitric oxide synthase induction in activated murine macrophages)

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

L13 ANSWER 22 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:324877 CAPLUS

DN 122:89488

TI Pharmaceutical compositions containing beta-naphthoquinone derivatives for accelerating the proliferation of endothelial cells and inhibiting NO synthases

```
IN
     Cazenave, Jean-Pierre; Cazenave, Jean-pierre; Hercelin, Bernard;
     Teisseire, Bernard
PA
     Roussel-UCLAF, Fr.
     Eur. Pat. Appl., 6 pp.
SO
     CODEN: EPXXDW
DT
     Patent
LA
     French
FAN.CNT 1
     PATENT NO.
                         KIND
                                             APPLICATION NO.
                                 DATE
                                                                     DATE
PΙ
     EP 631776
                                 19950104
                          A1
                                             EP 1994-401460
                                                                     19940628
     EP 631776
                                 2000/1122
                          B1
         R: AT, BE, CH, DE, DK, ES/, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
                                             FR 1993-8111
                                                                 A 19930702.
     FR 2707494
                                 19/950120
                                             FR 1993-8111
                                                                     19930702
     FR 2707494
                          В1
                                 19950825
     AT 197668
                          Ε
                                 20001215
                                             AT 1994-401460
                                                                     19940628
                                                                 A 19930702
                                             FR 1993-8111
                                 20010401
     ES 2154285
                          ጥ3
                                             ES 1994-401460
                                                                     19940628
                                                                 A 19930702
                                             FR 1993-8111
     PT 631776
                          Т
                                 20010531
                                             PT 1994-401460
                                                                     19940628
                                             FR 1993-8111
                                                                 A 19930702
     CA 2127214
                          AΑ
                                 19950103
                                             CA 1994-2127214
                                                                     19940630
     CA 2127214
                          C
                                 20041026
                                             FR 1993-8111
                                                                 A 19930702
     US 5478821
                          Α
                                 19951226
                                             US 1994-269648
                                                                     19940630
                                            FR 1993-8111
                                                                 A 19930702
     JP 07145129
                          A'2
                                 19950606
                                             JP 1994-171587
                                                                     19940701
                                             FR 1993-8111
                                                                 A 19930702
                          Á2
     HU 70507
                                 19951030
                                             HU 1994-1977
                                                                     19940701
     HU 214716
                          /B
                                 19980528
                                             FR 1993-8111
                                                                 A 19930702
     RU 2131246
                          C1
                                 19990610
                                             RU 1994-22756
                                                                    19940701
                                             FR 1993-8111
                                                                 A 19930702
     GR 3035059
                          T3
                                 20010330
                                             GR 2000-402747
                                                                     20001213
                                             FR 1993-8111
                                                                 A 19930702
AB
     Pharmaceutical compns. containing beta-naphthoquinone derivs. (Markush
     structure given) are used for accelerating the proliferation of
     endothelial cells and inhibiting NO synthases. Naftazone (I) at
     1x10-5-10-7 M accelerated the proliferation of endothelial cells by a
     factor of 2. A tablet contained I 10, and excipients q.s. 150 mg.
IT
     6373-60-0 15687-37-3, Naftazone 51055-26-6
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (pharmaceuti¢al compns. containing beta-naphthoquinone derivs. for
        accelerating the proliferation of endothelial cells and inhibiting
        nitric oxide synthases)
RN
     6373-60-0 CAPLUS
CN
     1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME)
             – OH
     15687-37-3 CAPLUS
RN
```

Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX

CN

NAME)

```
RN
     51055-26-6 CAPLUS
CN
     Acetic acid, (1-oxo-2(1H)-naphthalenylidene)hydrazide (9CI) (CA INDEX
            N-NHAC
     ANSWER 23 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
L13
AN
     1995:324876 CAPLUS
DN
     122:89487
     Pharmaceutical compositions containing derivatives of beta-naphthoquinone
TI
     for inhibiting platelet aggregation
IN
     Blache, Denis; Bloy, Christian; Hercelin, Bernard
PA
     Roussel-UCLAF, Fr.
SO
     Eur. Pat. Appl., 5 pp.
     CODEN: EPXXDW
DT
     Patent
LΑ
     French
FAN.CNT 1
     PATENT NO.
                          ŔIND
                                 DATE
                                              APPLICATION NO.
                                                                      DATE
                                 19950104
PΙ
     EP 631777
                           A1
                                              EP 1994-401461
                                                                      19940628
     EP 631777
                           В1
                                 20001122
         R: AT, BE, CH!
                          DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
                                              FR 1993-8112
                                                                   A 19930702
     FR 2707495
                           A1
                                 19950120
                                              FR 1993-8112
                                                                      19930702
     FR 2707495
                           В1
                                 19950901
     AT 197669
                                 20001215
                                              AT 1994-401461
                                                                      19940628
                                              FR 1993-8112
                                                                      19930702
     ES 2154286
                           T3
                                 20010401
                                              ES 1994-401461
                                                                      19940628
                                              FR 1993-8112
                                                                     19930702
     PT 631777
                           Т
                                 20010531
                                              PT 1994-401461
                                                                      19940628
                                              FR 1993-8112
                                                                     19930702
     CA 2127215
                                 19950103
                           AA
                                              CA 1994-2127215
                                                                      19940630
     CA 2127215
                           C
                                 20041026
                                              FR 1993-8112
                                                                   A 19930702
        5523322
                                 19960604
                                              US 1994-269649
                                                                      19940630
                                              FR 1993-8112
                                                                   A 19930702
       07145128
                           A2
                                 19950606
                                              JP 1994-171586
                                                                      19940701
                                              FR 1993-8112
                                                                   A 19930702
     HU 70508
                                 19951030
                                             HU 1994-1978
                           A2
                                                                      19940701
     HU 214058
                           В
                                 19971229
                                              FR 1993-8112
                                                                      19930702
```

AB Pharmaceutical compns. containing derivs. of beta-naphthoquinone (Markush

RU 1994-22757

FR 1993-8112

FR 1993-8112

GR 2000-402746

19940701

19930702

20001213

A 19930702

19981210

20010330

C1

T3

RU 2122853

GR 3035058

structure given) are used for inhibition of platelet aggregation. Aggregation of human platelets stimulated by thrombin was decreased the by 70-20% in presence of 1x10-4-10-6 M naftazone (I). A tablet contained I 10, and excipients q.s. 150mg. 51055-26-6P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (pharmaceutical compns. containing derivs. of beta-naphthoquinone for inhibiting platelet aggregation/ 51055-26-6 CAPLUS Acetic acid, (1-oxo-2(1H)-naphthalenylidene)hydrazide (9CI) (CA INDEX -NHAC 6373-60-0 15687-37-3,/Naftazone RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (pharmaceutical compns. containing derivs. of beta-naphthoguinone for inhibiting platelet aggregation) 6373-60-0 CAPLUŠ 1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME) OH 15687-37-B CAPLUS Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

ANSWER 24 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:541534 CAPLUS

121:141534 DN

IT

RN

CN

IT

RN

CN

RN

CN

Modification of the dissolution behavior of a water-insoluble drug, ΤI naftazone, for zero-order release matrix preparation

Giunchedi, Paolo; Maggi, Lauretta; La Manna, Aldo; Conte, Ubaldo Dep. Pharm. Chem., Univ. Pavia, Pavia, 27100, Italy ΑU

CS

Journal of Pharmacy and Pharmacology (1994), 46(6), 476-80 SO CODEN: JPPMAB; ISSN: 0022-3573

DT Journal

- LA English
- AB The preparation of hydrophilic matrix tablets able to release naftazone, a water-insol. drug, into an aqueous medium at a constant rate (zero-order dissoln.) is described. Enhancement of dissoln. rate of the drug was achieved using cross-linked carmellose sodium,  $\beta$ -cyclodextrin or hydroxypropyl- $\beta$ -cyclodextrin. Hypromellose was used as a water-gelling polymer. Tablets could be prepared that released naftazone at a constant rate over 16 h.
- IT 15687-37-3, Naftazone

RL: BIOL (Biological study)

(tablets, zero-order release matrixes for)

- RN 15687-37-3 CAPLUS
- CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

- L13 ANSWER 25 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 1994:297901 CAPLUS
- DN 120:297901
- NMR of terminal oxygen. Part/13. 170-NMR spectra of C-nitroso compounds, thionitrites and NO+ ion: resonance effects in O:N-X compounds and correlation with CD spectra/
- AU Dahn, Hans; Pechy, Peter; Floegel, Rainer
- CS Inst. Chim. Org., Univ. Lausanne, Lausanne, CH-1005, Switz.
- SO Helvetica Chimica Acta (1994), 77(1), 306-16 CODEN: HCACAV; ISSN: 0018-019X
- DT Journal
- LA English
- The 170-NMR signals of four true C-nitroso compds., namely, Me3CNO and AB RC6H4NO (R = H, 2-Me,  $\frac{1}{2}$ -Me2N), appear at particularly low field (1550-1265 ppm), whereas the dimers (azodioxy type) resonate at ca. 400 ppm and the isonitroso compds. I /(R = NO, R1 = OH; R = OH, R1 = NO) at ca. 250 ppm. S-Nitroso compds. (thionitrites), namely, Ph3CSNO and AcNHCH(CO2H)CMe2SNO (II), show shift values of ca. 1300 ppm, not far from C-NO; the NO+ ion is more strongly shielded (474 ppm). The results, together with those for higher-shielded nitroso compds. X-NO (X = RO, R2N, Cl, O-) are discussed in terms of (a) resonance stabilization through n-donation from X  $(\pi ext{-bond order, app}_{r}')$  oximated by the known barriers of rotation around the X-N bond) and lof (b) electronic excitation energies  $\Delta E$ . The latter are approximated by long-wave (symmetry-forbidden) UV/VIS absorptions and confirmed, where available, by the maximum of the CD curves; the CD curve of  $I\!\!/I$  has been measured. The  $\delta(170)$  values of X-NO depended both on bond order and on AE, which could not be separated The higher shielding of NO+ compared with X-N:O is explained on the basis of anisotropy effects, which differ between sp and sp2 systems.
- IT **6373-60-0**, 1,2-Naphthoquinone 2-oxime
  - RL: PRP (Properfies)

(NMR of oxygen-17 in)

- RN 6373-60-0 CAPIUS
- CN 1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME)

```
ANSWER 26 OF 65 CAPLUS
                               COPYRIGHT 2005 ACS on STN
     1993:572869 CAPLUS
ΑN
DN
     119:172869
ΤI
     Lithium complexes of 1,2-naphthaquingne monooximes. The x-ray crystal
     structure of (1,2-naphthaquinone-1-\( \varphi \) xime) (1,2-naphthaquinone-1-
     oximato)lithium(I).ethanol
AU
     Charalambous, John; Fogg, Peter G/T.; Gaganatsou, Paraskevi; Hendrick,
CS
     Sch. Appl. Chem., Univ. North London, London, N7 8DB, UK
SO
     Polyhedron (1993), 12(8), 879-82
     CODEN: PLYHDE; ISSN: 0277-538/
DT
     Journal
LA
     English
AB
     Li(1-nqo) \cdot 0.5EtOH, Li(1-nqof) \cdot (1-nqoH) \cdot EtOH \cdot (1-nqoH) = 1,2-naphthaquinone-1-
     oxime), and Li(2-nqo).0.5EtOH, Li(2-nqo)(2-nqoH).EtOH(2-nqoH =
     1,2-naphthaquinone-2-oxime) were prepared by the interaction of the quinone
     oxime with LiOH. The structure of Li(1-ngo)(1-ngoH). EtOH was determined by
     single-crystal x-ray diffraction techniques. The Li atom is
     pentacoordinated in a distorted square pyramidal environment. The EtOH is
     coordinated to Li and/the NO groups of the 2 chelating groups are cis due
     to formation of an asym. H bond between the neutral and anionic ligands.
IT
     148644-13-7P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of/)
RN
     148644-13-7 CAPLÚS
CN
     1,2-Naphthalenedáone, 2-oxime, lithium salt (2:1) (9CI) (CA INDEX NAME)
     1/2 Li
     ANSWER 27 OF 65 CAPLUS
                               COPYRIGHT/2005 ACS on STN
L13
AN
     1993/154439 CAPLUS
DN
     118:154439
ΤI
     Matrixes for extended release of a water insoluble drug (naftazone)
ΑU
     Giunchedi, P.; Conte, U.; La Manna, A.
CS
     Dep. Pharm. Chem., Univ. Pavia, Pavia, 27100, Italy
SO
     Proc. Int. Symp. Controlled Release Bioact. Mater., 19th (1992), 291-2.
     Editor(s): Kopecek, Jingrich. Publisher: Controlled Release Soc.,
     Deerfield, Ill.
     CODEN: 58JTAJ
```

Ball milling and loading of naftazone with a dissoln. rate enhancer are simple and effective techniques that permits to obtain a remarkable

DT

LΑ

AB

Conference

English

improvement of the dissoln. rate of the water insol. drug. The drug/enhancer systems obtained (that are characterized by the presence of a drug with improved dissoln. rate/characteristics) can be mixed with a hydrophilic gel-forming polymer, to obtain, after direct compression, the matrixes. These matrixes are able to give extended drug release, with a good linearity, and until almost the whole drug content is released from them.

IT **15687-37-3**, Naftazone

RL: PROC (Process)

(matrixes for extended release of, as model of water-insol. drug)

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

L13 ANSWER 28 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:201101 CAPLUS

DN 116:201101

TI Process for preparing pharmaceutical compositions having an increased active substance dissolution rate

IN Conte, Ubaldo; La Manna, Aldo; Giunchedi, Paolo

PA Farma Resa S.r.l., Italy

SO Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN. CNT 1

P

AN.		ΓΕΝΤ NO.		KIND /	DATE	APPLICATION NO.		DATE
PI	EP	468392 R: AT, BE, (	ΞH,	A1 DE, DK,		EP 1991-112214 B, GR, IT, LI, LU, NL	- , SI	19910722 E
	_	2047944 2047944		AA C	19920128 20020312	IT 1990-21091 CA 1991-2047944		19900727 19910726
		04234316		7	19920824	IT 1990-21091 JP 1991-210407	A	19900727 19910729
	JP	3488475		A/2 B2 /	20040119	IT 1990-21091	A	19900727
	US	5476654		A	19951219	US 1994-321123 IT 1990-21091		19941011 19900727
	uc	5849329		A	19981215	US 1991-733457 US 1993-76477		19910722 19930614
	US	5049329		А	19981215	US 1995-524739 IT 1990-21091 US 1991-733457		19950907 19900727 19910722
			1			<del></del> -	-	19941011

AB Pharmaceutical tablets and capsules with an increased active substance dissoln. rate are prepared by co-grinding or dry-mixing the active substance with cyclodextrins or with hydrophilic polymers which swell on contact with water. Thus, naftazone 10.0g and crosslinked Na CMC 90.0 g were placed in a jar of a ceramic ball mill and a series of ceramic balls were added to occupy about half the available volume Grinding was continued for 2 h at 70 rpm and the resulting homogeneous orange-colored mixture was formulated with excipients to give 300 mg tablets (containing 30 mg naftazone

each). The tablets showed good disintegration characteristics. IT 15687-37-3, Naftazone RL: BIOL (Biological study) (oral compns. containing water-swellable polymers and, controlled-release) RN 15687-37-3 CAPLUS Hydrazinecarboxamide, 2-(1-oxó-2(1H)-naphthalenylidene)- (9CI) (CA INDEX CNNAME) L13 ANSWER 29 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN AN 1991:49691 CAPLUS 114:49691 DN ΤI Cathodic and adsorptive stripping voltammetry of naftazone Khodari, M.; Vire, J. C.; Patriarche, G. J.; Ghandour, M. A. Inst. Pharm., Free Univ., Brussels, B/1050, Belg. AU CS Analytical Letters (1990), 23(10), 1873-85 SO CODEN: ANALBP; ISSN: 0003-2719 DTJournal LΑ English GΙ NNHCONH<sub>2</sub> Ι Naftazone (I) undergoes a reversible 2-electron transfer in both acidic AB and alkaline solns. and also gives rise at pH > 7 to an anodic wave attributed to the formation of a/mercury derivative Cathodic stripping voltammetry is proposed to determine the compound down to 5 + 10-9M after accumulation of its mercury salt formed at -0.05 V in a 0.05M NaOH solution These results have been compared with those obtained by performing an adsorptive collection of the drug in a pH 3 NaClO4 solution Concns. ranging from 1 + 10-7-2 + 10-10M can be easily investigated, the detection limit being 7 + 10/-11M. The influence of several operational parameters has also been considered. ΙT 15687-37-3, Naftazone RL: ANT (Analyte); ANST (Analytical study) (determination of, by cathodic and adsorptive stripping voltammetry) RN 15687-37-3 CAPLUS CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME) CHN.

```
L13 ANSWER 30 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     1990:448496 CAPLUS
     113:48496
DN
TI
     Polarographic study of copper(II) complexes with some naphthoquinonic
     derivatives
ΑU
     El Maali, N. Abo; Vire, J. C.; Patriarche, G. J.; Ghandour, M. A.
CS
     Inst. Pharm., Free Univ. Brussels, Brussels, B-1050, Belg.
SO
     Analytical Letters (1990), 23(3), 529-42
     CODEN: ANALBP; ISSN: 0003-2719
DT
     Journal
     English
LΑ
AΒ
     Differential pulse polarog. has/been used to investigate the complexation
     reaction occurring between Cu(II) ions and some naphthoquinonic derivs.
     The importance of the substituent at the 2-position on the naphthoquinone
     ring has been demonstrated. / Compared with 1,4-naphthoquinone which
     exhibits a very weak complex, the presence of a Me group enhances the
     complexation reaction while a hydroxy group has an inhibiting effect.
     Naftazone, which includes/a semicarbazone group, gives rise to a stronger
     reaction due to the precipitation of the side chain in the complex formation.
IT
     15687-37-3D, copper complexes
     RL: PRP (Properties)
        (stability constant of)
RN
     15687-37-3 CAPLUS
     Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
CN
    ANSWER 31 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
L13
     1989:65439 CAPLUS
AN
DN
     110:65439
TI
     Lithium and indium quinonéoximic complexes and their application in
     scintillation counting
ΑU
     Gaganatsou, Paraskevi
     Counc. Natl. Acad. Awards, London, UK
CS
SO
     (1987) 224 pp. Avail/: Univ. Microfilms Int., Order No. BRD-81430
     From: Diss. Abstr. Int. B 1988, 49(4), 1237
DT
     Dissertation
LΑ
     English
AB
     Unavailable
IT
     6373-60-0D, 1,2-Naphthoquinone-2-oxime, lithium complexes
     RL: DEV (Device component use); USES (Uses)
        (scintillators from, in liquid scintillation counting)
RN
     6373-60-0 CAPLÚS
CN
     1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME)
              OH
```

```
L13
    ANSWER 32 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     1987:546173 CAPLUS
     107:146173
DN
ΤI
     The interaction of pentacarbonyliron(0) with selected 1,2-quinone
     monooximes (2-nitrosophenols) in the presence or absence of aniline
     Charalambous, John; Haines, L. Ian B.; Morgan, Jackie S.; Peat, David S.;
AU
     Campbell, Michael J. M.; Bailey, Joe
CS
     Sch. Chem., Polytech. North London, London, N7 8DB, UK
SO
     Polyhedron (1987), 6(5), 1027-32
     CODEN: PLYHDE; ISSN: 0277-5387
DT
     Journal
LΑ
     English
AB
     Reaction of Fe(CO)5 with 1,2-quinone monooximes (qoH) gives the Fe(qo)2
     complexes as the main products together with various organic products. In
     the presence of PhNH2 the main products are again Fe(qo)2 which are
     accompanied by the formation of organic products and complexes of type
     Fe(qo-A)2 where qo-A is a species arising from the coupling of the qo
     ligand with PhNH2. The formation of the latter type of complex and of the
     organic products is rationalized in terms of deoxygenation of the go ligand.
     Fe(qo)2 and Fe(qo-A)2 have/oligomeric structures as indicated by their
     magnetic properties and Møessbauer spectra. Both these types of complex
     react with pyridine to give bis(pyridine) adducts.
     6373-60-0, 1,2-Naphthoquinone-2-oxime
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of iron-goordinated, with aniline)
RN
     6373-60-0 CAPLUS
     1,2-Naphthalenedioné, 2-oxime (9CI) (CA INDEX NAME)
CN
              OH
    ANSWER 33 OF 65 CAPLUS
L13
                              COPYRIGHT 2005 ACS on STN
     1986:601822 CAPLUS
ΑN
DN
     105:201822
ΤI
     Proton and carbon-13 NMR studies on nitrosonaphthols, and their
     complexation with the dioxouranium(VI) ion
ΑU
     Vainiotalo, Anto; Vepsalainen, Jouko
     Dep. Chem., Univ. Joensuu, Joen/suu, SF-80101, Finland
CS
SO
     Magnetic Resonance in Chemistry (1986), 24(9), 758-61
     CODEN: MRCHEG; ISSN: 0749-1581
DT
     Journal
LΑ
     English
     The 1H and 13C NMR spectra of 1-nitroso-2-naphthol and its disodium
AB
     3,6-disulfonate, 2-nitroso\frac{1}{2}1-naphthol and its sodium 4-sulfonate and the
     complexes of the sulfonated ligands with UO2(VI) were recorded and
     analyzed. The results show the nitrosonaphthols exist predominantly in
     the oxime form, and the 1/-nitroso compds. have a preferred structure. The
     quinonoid O does not také part in the complexation with UO2(VI), which is
     effected by chelation through the oxime O and N.
IT
     6373-60-0
     RL: PRP (Properties)
        (NMR of proton and carbon-13 in, structure in relation to)
RN
     6373-60-0 CAPLUS
    1,2-Naphthalenedione/2-oxime (9CI) (CA INDEX NAME)
```

```
OH
     ANSWER 34 OF 65 CAPLUS
                              COPYRIGHT 2005 ACS on STN
L13
AN
     1985:464352 CAPLUS
DN
     103:64352
TI
     Pharmacokinetics of naftazone/in dogs
ΑU
     Bressolle, F.; Bres, J.
     Lab. Chim. Anal., Fac. Pharm., Montpellier, 34060, Fr.
CS
SO
     Farmaco, Edizione Pratica (1985), 40(6), 187-98
     CODEN: FRPPAO; ISSN: 0430-0912
DT
     Journal
LΑ
     French
GI
           NNHCONH2
                      Ι
```

The pharmacokinetics of naftazone (I) AΒ [15687-37-3] were investigated in dogs after i.v. (1 mg/kg) and oral (1 and 2 mg/kg) administration. A 2-compartment body model was compatible with the data after i.v. administration; the apparent half-lives of the 2 phases were 0.527 and 2.8 h/(plasma data); the volume of distribution was very high (6.2 L/kg). About  $9\dot{2}$ % of the i.v. dose was recovered in urine in the form of metabolites (sulfate or glucuronide conjugates); unchanged I was never detected in urine. For these metabolites the half-life of the excretion phase was 4.10 h. After oral administration, absorption of I was very fast, with a half-life of 0.782 h; after the maximum, only 1 phase (half-life 2.25 h) was detected. The half-life of the excretion phase was 5.12 h. The absolute bioavailability of I, determined from urine data, was 66%. plasma levels at all times, and the area under the plasma concentration-vs.-time

curves was directly related to the dose, and since the time to reach the maximum was the same for the 2 dose, it follows that the absorption and the distribution kinetics of I in dogs are linear.

15687-37-3
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (pharmacokinetics of)

RN 15687-37-3 CAPLUS

IT

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

$$N-NH-C-NH^{2}$$

```
ANSWER 35 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     1985:154850 CAPLUS
DN
     102:154850
     Application of principal components analysis to TLC data for 596 basic and
TT
     neutral drugs in four eluent systems
ΑU
     Musumarra, Giuseppe; Scarlata, Giuseppe; Romano, Guido; Clementi, Sergio;
     Wold, Svante
     Ist. Dip. Chim. Chim. Ind., Univ. Catania, 95125, Italy
CS
SO
     Journal of Chromatographic Science (1/984), 22(12), 538-47
     CODEN: JCHSBZ; ISSN: 0021-9665
DT
     Journal
LΑ
     English
AB
     Principal component anal. of the/Rf values for 596 basic and neutral drugs
     in 4 eluent mixts. provided a significant 2-component model which
     explained 77% of the total variance. Each drug was characterized on a
     plane by 2 principal component scores. The loading plot shows that 3
     eluent mixts. are clustered into the same group providing similar
     information. For identification of unknowns, the method provided a
     drastic reduction of the range of possibilities to a few candidates.
IT
     15687-37-3
     RL: ANT (Analyte); ANST (Analytical study)
        (chromatog. of, thin-layer, principal component anal. in)
RN
     15687-37-3 CAPLUS
     Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
CN
     NAME)
     ANSWER 36 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
L13
     1984:510877 CAPLUS
AN
DN
     101:110877
     Synthesis and structural study of azidonaphtho-as-triazines.
TI
                                                                     "Annelation
     effect" in azide-tetrazole equilibria
     Hajos, G.; Messmer, A.; Neszmelyi, A.; Parkanyi, L. Cent. Res. Inst. Chem. Hung. Acad. Sci., Budapest, H-1525, Hung.
ΑU
CS
SO
     Journal of Organic Chemistry (1984), 49(17), 3199-203
     CODEN: JOCEAH; ISSN: /0022-3263
DT
     Journal
LΑ
     English
OS
     CASREACT 101:11087;
GI
```

Azide derivs. of the three possible naphtho-as-triazines were prepared and the equilibrium leading to fused tetrazoles were investigated by NMR spectroscopy and X-ray anal. Comparison of the differently annelated systems (topol. isomers) révealed an essential annelation effect. While 3-azidonaphtho[2,1-c]-as-triazine and 3-azidonaphtho[1,2-c]-as-triazine formed b-fused tetrazoles I and II, the linear 3-azidonaphtho[2,3-e]-astriazine gave III.

IT 6373-60-0

> RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with dithiocarbazate)

RN 6373-60-0 CAPLUS

1,2-Naphthalenedione / 2-oxime (9CI) (CA INDEX NAME) CN

ANSWER 37 OF 65 CAPLUS COPYRIGHT 2/005 ACS on STN T.13

AN 1984:416355 CAPLUS

101:16355 DN

TI Color changes in screened indicators

Bosch, Elisabeth; Casassas, Enric; Izquierdo, Alvaro; Roses, Marti Dep. Quim. Anal., Univ. Barcelona, Barcelona, Spain ΑU

CS

SO Analytical Chemistry (1984), 56/(8), 1422-8

CODEN: ANCHAM; ISSN: 0003-2700

DT Journal

LA English

AB Several efficient screened indicators are prepared by use of complementary tristimulus data of different acid-base indicators and screening dyes. The results show that color/changes from one pure acid-base indicator and . different dyes, when represented in the complementary chromaticity diagram, are on the same chromatic straight line. For a variety of neutralization indicators the equation defining this line from the color parameters of the indicator is developed theor. and compared with the exptl. equation. An expression is developed defining the best screened indicator that can be prepared from a given pure acid-base indicator and dyes to obtain the optimum color change. This optimum color change always occurs between 2 complementary colors with the same relative grayness. Computer programs related to the screening method were also developed. IT 15687-37-3

RL: ANST (Analytical study)

(indicator, screening of, with dyes and tristimulus colorimetry)

```
15687-37-3 CAPLUS
RN
     Hydrazinecarboxamide, 2-/(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
CN
     NAME)
L13
     ANSWER 38 OF 65 CAPLUS
                               COPYRIGHT 2005 ACS on STN
AN
     1983:118670 CAPLUS
DN
     98:118670
TI
     Study of semicarbazones and thiosemicarbazones derived from
     1,2-naphthoquinone, as acid-base indicators: evaluation of their
     transition limits through the chromaticity coordinates
AU
     Izquierdo, A.; Bosch, E.; Rodrigo,/V.
     Dep. Anal. Chem., Univ. Barcelona/ Barcelona, Spain
CS
     Talanta (1982), 29(12), 1125-9
SO
     CODEN: TLNTA2; ISSN: 0039-9140
DT
     Journal
LΑ
     English
     The use of 1,2-naphthoquinoné-2-semicarbazone, 1,2-naphthoquinone-2-
AB
     semicarbazone-4-sulfonic acid, and 1,2-naphthoquinone-2-thiosemicarbazone-
     4-sulfonic acid as acid-base indicators was studied. The sharpness of the
     indicator transitions was/investigated by photometric titrns. and the
     color quality specified with the aid of the CIE chromaticity system. The
     3 substances are satisfáctory as neutralization indicators.
ΙT
     15687-37-3
     RL: ANST (Analytical study)
        (indicators, acid/base, chromaticity coordinates for evaluation of
        transition limits of)
RN
     15687-37-3 CAPLUS/
CN
     Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
     NAME)
     ANSWER 39 OF 65 CAPLUS GOPYRIGHT 2005 ACS on STN
L13
AN
     1981:174719 CAPLUS
DN
     Synthesis and hemostatic activity of 1,2-naphthoquinones
     Yamada, Toshihiro; Yamashita, Takehiko; Nakamura, Mashanori; Shimamura,
ΑU
     Hiroshi; Yamaguchi, Azuma; Takaya, Mashahiro
Res. Lab., Morishita Pharm. Co., Ltd., Japan
CS
     Yakugaku Zasshi (19/80), 100(8), 799-806
SO
     CODEN: YKKZAJ; ISŞN: 0031-6903
DT
     Journal
LΑ
     Japanese
OS
     CASREACT 94:174/19
GI
```

AB Naphthoquinone derivs. I [R = CONH2, CONHMe, CONHPh, CONHCH2CH2OH, COCONH2, C(:NH)NH2, C(S)NH2, C(S)NHMe; R1 = H, SO3H, SO3NA, SO3NH4, attached at 4, 5, 6, 7, 8] and II (R2 = CONHMe, CONHPh, CONHCH2CH2OH, C(S)NH2, COCONH2) were prepared, usually by treating the corresponding dione with a carbazide derivative Some I and II decreased bleeding time in mice by >15 s.

IT 15687-37-3

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide/ 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

L13 ANSWER 40 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1981:52780 CAPLUS

DN 94:52780

TI Ultraviolet spectrophotometry in the control of drugs. XXV. Prediction of the spectral behavior of drugs with pyridine, naphthalene, quinoline and isoquinoline chromophores in the molecules

AU Kracmar, J.; Kracmarova, J.

CS Statni Ustav Kontrolu Leciv, Prágue, Czech.

SO Cesko-Slovenska Farmacie (1980), 29(3-4), 57-66 CODEN: CKFRAY; ISSN: 0009-0530

DT Journal

LA Czech

AB UV absorption spectra are described for bisacodyl [603-50-9], trimedoxime [56-97-3], tolnaftate [2398-96-1], nafthazone [15687-37-3], and Vioform [130-26-7] solns. in MeOH. The effects of substitution on UV spectra are discussed by comparing the spectrum of bisacodyl with that of trimedoxime and the spectrum of tolnaftate with that of nafthazone. The effects of solvents on the spectra are demonstrated by comparing the UV spectra of Vioform in MeOH and CHCl3 and the spectra of tolnaftate in MeOH, CHCl3, 0.01N HCl, and 0.01N NaOH. The results are compared with known spectra of 14 pyridine derivs., 15 naphthalene derivs., and 12 quinoline and isoquinoline derivs.

IT 15687-37-3

RL: PRP (Properties)
 (UV spectrum of)

RN 15687-37-3 CAPLUS

```
CN
     Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
     NAME)
     ANSWER 41 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     1980:99625 CAPLUS
DN
     92:99625
     Electrochemical study of 1,2/naphthoquinone-4-sulfonate and
ΤI
     1,2-naphthoguinone semicarbazone
ΑU
     Vire, J. C.; Patriarche, G/J.; Christian, G. D.
     Inst. Pharm., Univ. Libre/Bruxelles, Brussels, B-1050, Belg.
CS
SO
     Fresenius' Zeitschrift fuer Analytische Chemie (1979), 299(3), 197-201
     CODEN: ZACFAU; ISSN: 001/6-1152
DT
     Journal
LΑ
     English
AB
     Electrochem. characteristics of Na 1,2-naphthoquinone-4-sulfonate
     [521-24-4] and naftazone (1,2-naphthoquinone semicarbazone) [
     15687-37-3] were studied by d.c., a.c., and differential pulse polarog. and cyclic voltammetry. Changes in the waves as a function of
     concentration and/pH indicate evidence of adsorption phenomena at the potential
     of the reduction/wave. These techniques also indicate the formation of a Hg
     derivative in the case of naftazone. The quant. determination of these 2
compds. is
     possible by polarog. Limits of detection are 5 + 10-6 and 5 +
     10-8 M, resp.
IT
     15687-37-3
     RL: ANT (Anályte); ANST (Analytical study)
         (determination of, by polarog.)
RN
     15687-37-3 CAPLUS
CN
     Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
     NAME)
L13
     ANSWER 42 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     1979:533659 CAPLUS/
DN
     91:133659
     Quantitative determination of drugs by in situ spectrophotometry of
     chromatograms for/pharmacokinetic studies. I. Sulpiride and other
     benzamides, vincámine, naftazone
AU
     Bressolle, F.; Bres, J.; Brun, S.; Rechencq, E.
     Lab. Chim. Anal, Fac. Pharm., Montpellier, 34060, Fr.
CS
     Journal of Chromatography (1979), 174(2), 421-33
SO
     CODEN: JOCRAM; ISSN: 0021-9673
DT
     Journal
LΑ
     French
```

Methods for determination of sulpiride (I) AB [15676-16-1] and other benzamides, vincamine (II) [1617-90-9] and maftazone (III) [15687-37-3] in plasma (or blood) and urine are described using direct UV reflectance spectrophotometry on thin-layer chromatog. (TLC) at 293, 280, and 270 nm resp. Urine samples are applied directly on TLC along with a calibration curve on each plate. Plasma /or total blood) samples are exted., and an internal standard is added before application; slopes of the obtained calibration curves do not change significantly from plate to plate, thus allowing several detns. on/the same plate. The sensitivity is 2 µg in a 1-mL sample (amount applied 30 ng) for I and related compds. and about the same for II. III is determined in plasma with simultaneous reflectance and transmittance spectrophotometric measurements at 520 nm on chromatoplates sprayed with Pb acetate; the sensitivity reached is 10 ng in a 1-mL sample (amount applied 0.5 ng). For all drugs studied, the proposed techniques are sp., reliable and sensitive enough and can be used to perform pharmacokinetic studies in human or in animal after administration of doses in the therapeutic range.

IT 15687-37-3

RL: ANT (Analyte); ANST (Analytical study)

(determination/of, in blood plasma and urine by thin-layer chromatog.)

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

L13 ANSWER 43 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1979:444560 CAPLUS

DN 91:44560

TI Ultraviolet spectrophotometry in drug control. Part 23: Conclusions from the spectrophotometric behavior of drugs with pyridine, naphthalene, quinoline and isoquinoline chromophores

AU Kracmar, Josef; Kracmarova, J.

```
CS
     Staatl. Inst. Arzneimittelkontrolle, Prague, 100 41/10, Czech.
     Pharmazie (1979), 34(1), 27-32
SO
     CODEN: PHARAT; ISSN: 0031-7144
DT
     Journal
     German
T.A
AB
     The UV and visible spectra of 9 drugs with pyridine [110-86-1],
     naphthalene [91-20-3], isoquinoline [119-65-3], and quinoline [91-22-5]
     chromophores were given. Absorption bands and substituents effects of
     these chromophore groups were presented.
IT
     15687-37-3
     RL: PRP (Properties)
        (UV and visible spectra of, chromophores in relation to)
RN
     15687-37-3 CAPLUS
CN
     Hydrazinecarboxamide, \cancel{2}-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
     NAME)
    ANSWER 44 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
     1978:423462 CAPLUS
AN
DN
     89:23462
ΤI
     Study of the reduction mechanism of 1,2-naphthoguinone monooximes at a
     drop electrode
ΑU
     Bonastre, J.; Castetbon, A., Mericam, P.
CS
     Inst. Univ. Rech. Sci., Univ. Pau et Pays Adour, Pau, Fr.
SO
     Bulletin de la Societe Chimique de France (1977), (11-12, Pt. 1), 1099-106
     CODEN: BSCFAS; ISSN: 0037-8968
DT
     Journal
     French
LΑ
     A study of the electrochem. oxidation at a dropping Hg electrode at pH 0.5-13
AB
     of the 2 monooximes of 1,2-naphthoquinone revealed an ECE mechanism.
     Mixts. of 2 new compds. were formed by the oxidation of both the
     1-amino-2-naphthol/(I) and the 2-amino-1-naphthol produced by the reduction;
     e.g., oxidation of I gave a mixture of 1-[(3,4-dihydroxy-1-naphthyl)imino]-
     2(1H)-naphthalenone and 4-[(2-oxo-1(2H)-naphthalenylidene)amino]-1,2-
     naphthoquinone.
IT
     6373-60-0
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (electrochem. reduction of, mechanism of)
     6373-60-0 ÇAPLUS
RN
     1,2-Naphthaienedione, 2-oxime (9CI) (CA INDEX NAME)
CN
              OH
     ANSWER 45 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
L13
AN
     1978:163541 CAPLUS
DN
     88:163541
TΙ
     Naftazone
```

AU Alhadeff, M. CS Spain

SO Drugs of Today (1977), 13(12), 538-44

CODEN: MDACAP; ISSN: 0025-7656

DT Journal; General Review

LA English/Spanish

GI

AB A review with 14 refs. is given on naftazone (I) [15687-37-3], a hemostatic drug useful in the treatment of venous insufficiency. I acts by decreasing i.m. pressure and by decreasing the activities of lysosomal enzymes in the vein wall.

IT 15687-37-3

RL: PROC (Process)

(pharmacol. evaluation of)

Ι

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

L13 ANSWER 46 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1978:74234 CAPLUS

DN 88:74234

TI Sodium 1,2-dihydro-1-hydroxy-2-semicarbazono-1-naphthalenesulfonate

IN Nakamura, Masanori; Takaya, Masahiro; Matsuo, Sumio; Tanizawa, Hisayuki;
Yuizono, Rinichi

PA Morishita Pharmaceutical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 52118452 A2 19771004 JP 1976-36299 A 19760330

JP 1976-36299 A 19760330

ΙI

GI

PΙ

- AB NaHSO3 (125 g) was refluxed with 216 g II in MeOH-H2O for 10 h to give 230 g title compound (I). Hemostatic data of I are given in mice in comparison with carbazochrome Na sulfonate and vitamin K1. LD50 of I were >2000 mg/kg in mice (p.o. and s.c.).
- IT 15687-37-3
  RL: RCT (Reactant); RACT (Reactant or reagent)
  (reaction of, with sodium bisulfite)
- RN 15687-37-3 CAPLUS
  CN Hydrazinecarboxamide, 2 (1-oxo-2(1H)-naphthalenylidene) (9CI) (CA INDEX NAME)

- L13 ANSWER 47 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 1977:495340 CAPLUS
- DN 87:95340
- TI Transmission and reflectance spectrophotometry applied to the determination of naftazone in/biological fluids
- AU Bressolle, F.; Bres, J.
- CS Lab. Chim. Anal., Fac. Pharm., Montpellier, Fr.
- SO Travaux de la Societe de Pharmacie de Montpellier (1977), 37(2), 113-28 CODEN: TSPMA6; ISSN: 0037-9115
- DT Journal
- LA French
- GI

- AB Naftazone (I) [15687-37-3] was determined in urine by thin-layer chromatog. of a 1  $\mu$ L sample on a siliac G gel plate with a CHCl3-MeOH (90:10) developing solution After migration the plate is exposed to HCl vapors and the I level is determined by direct reflection spectrometry (270 nm). In blood plasma (2 mL sample) I is determined by 1st extracting with EtOAc.
  - The extract is evaporated to dryness and the residue is suspended in EtOH (0.1 mL). Ten  $\mu L$  of EtOH solution is chromatographed, and after migration, the plate is exposed to Pb acetate. I is then determined at 520 nm. The method has a sensitivity of 1 ng I/5 mL sample.
- IT 15687 /37-3
  - RL: ANT (Analyte); ANST (Analytical study)
    - (determination of, in blood and urine, chromatog. and spectrometrically)
- RN 15687-37-3 CAPLUS
- CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

L13 ANSWER 48 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1976:135369 CAPLUS

DN 84:135369

TI 1,2-Naphthoquinone hydrazones

IN Yuizono, Tomokazu; Kishigawa, Torahiko; Takaya, Masahiro; Yamada, Toshihiro; Yamashita, Takehiko; Nakamura, Masanori

PA Morishita Pharmaceutical Co. / Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp/.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

ran.	PATENT NO.	KIND/	DATE	APPLICATION NO.		DATE
PI	JP 50131954 JP 57026508	A2/ B4	19751018 19820604	JP 1974-39069		19740406
		7		JP 1974-39069	Α	19740406

OS CASREACT 84:135369

GI

AB 1,2-Naphthoquimone hydrazones I [R = CONH2, CONH(CH2)nOH (n = 1-4), CONHMe, CONHPh, CSNH2, CSNHMe, CSNHPh, COCONH2, C(:NH)NH2, (CH2)nMe (n = 0-4); R1 = H, SO3H or its salt] were prepared by oxidation of 1- or 2-naphthol or their sulfonic acids with ON(SO3K)2 in the presence or absence of neutral salts, followed by reaction with H2NNHR. I, e.g., I (R = CONH2, R1 = 5-SO3Na) (II), had good hemostatic effect in mice. Thus, 2.5 g Na 2-naphthol-5-sulfonate was stirred with ON(SO3K)2 and NaH2PO4 in H2O at 0° for 4 hr in the dark and then treated with H2NNHCONH2.HCl to give 1.9 g/II. Among 11 more I prepared were I (R, R1 given): CONH2, H; CONHCH2CHOH, H; C(:NH)NH2, 4-SO3H; CSNH2, 5-SO3Na.

IT 15687-37-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 15687-37/3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

```
L13
     ANSWER 49 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     1976:130060 CAPLUS
DN
     84:130060
TI
     Development of an assay method for naftazone at the nanogram level by
     thin-layer chromatography and photodensitometry
     Bres, J.; Bressolle, F.
AU
     Lab. Chim. Anal., Fac. Pharm. Montpellier, Montpellier, Fr.
CS
SO
     Travaux de la Societe de Pharmacie de Montpellier (1975), 35(4), 381-93
     CODEN: TSPMA6; ISSN: 0037-9115
DT
     Journal
LΑ
     French
GT
            NNHCONH2
                      Ι
     A thin-layer chromatog.-photodensitometric method is described for
determination/
     naftazóné (I) [15687-37-3] in blood plasma and urine. The
     method has a sensitivity of 15 mg/ml.
IT
     15687-37-3
     RL: ANT (Analyte); ANST (Analytical study)
        (determination of, in blood and urine)
RN
     15687-37-3 CAPLUS
CN
     Hydrázinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
     NAME)
              NH-C-NH2
L13
    ANSWER 50 OF 65
                      CAPLUS
                             COPYRIGHT 2005 ACS on STN
AN
     1976:310 CAPLUS
     84:310
DN
ΤI
     Effect of quinones and phenois on noradrenalinic hypertension in the rat
ΑU
     Mathieu, F.; Lecomte, J.; Perouaux, G.
CS
     Lab. Physiol. Hum. Norm. Fathol., Univ. Liege, Liege, Belg.
SO
     Bulletin de la Societe Róyale des Sciences de Liege (1975), 44(3-4), 293-6
     CODEN: BSRSA6; ISSN: 0037-9565
DT
     Journal
LΑ
     French
AR
     None of the 8 quinones and phenols studied potentiated noradrenaline
     [51-41-2] -induced/hypertension in anesthetized rats.
ΙT
     15687-37-3
     RL: BIOL (Biological study)
        (hypertension from noradrenaline response to)
RN
     15687-37-3 CAPLUS
     Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
CN
```

```
NAME)
              NH-
                  - C- NH2
    ANSWER 51 OF 65 CAPLUS
                              COPYRIGHT 2005 ACS on STN
L13
ΑN
     1974:499220 CAPLUS
     81:99220
DN
ΤI
     Pharmacokinetics of tritium-labeled-naftazone in man
ΑŲ
     Delwaide, P. A.; Derouaux, G.; Heusghem, C.
CS
     Lab. Chim. Med., Toxicol. Hyg., Liege, Belg.
     Archives Internationales de Pharmacodynamie et de Therapie (1974), 208(2),
SO
     357-61
     CODEN: AIPTAK; ISSN: 0003-9/80
DT
     Journal
LΑ
     French
     Following oral or i.v. administration of 3H-labeled naftazone (I) [
AB
     15687-37-3] to humans,/the time course of plasma and urine total
     radioactivity indicated a long term retention of .sim.10% of the
     administered 3H-labe1.
IT
     15687-37-3
     RL: BIOL (Biological study)
        (pharmacokinet/ics of)
RN
     15687-37-3 CAPIÚS
CN
     Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
     NAME)
              NH-C-NH2
L13
    ANSWER 52 OF 65 CAPLUS
                              COPYRIGHT 2005 ACS on STN
AN
     1974:.145983 CAPLUS
DN
     80:145983
TI
     6-Hydroxy-8-oxodibenzo[i,mn]acridine
     Beaudet, Pierre; Beaudet, Camille
AU
     Soc. Etud. et Realisations/Sci., Brussels, Belg.
CS
     Chimica Therapeutica (1973), 8(6), 669-71
SO
     CODEN: CHTPBA; ISSN: 0009-4374
DT
     Journal
T.A
     French
GI
     For diagram(s), see printed CA Issue.
     The impurity commonly present in the hemostatic 1,2-naphthoquinone
AB
     2-semicarbazone (I) wás identified as the dibenzoacridone II. II was
     prepared by condensing 1,2-naphthoquinone with 1-amino-2-naphthol under
     oxidizing conditions/. Addition of 0.03% II did not affect the hemostatic
     activity of I.
ΙT
     15687-37-3
     RL: RCT (Reactant); RACT (Reactant or reagent)
```

(dibenzoacridoné as impurity in)

```
15687-37-3 CAPLUS
RN
CN
     Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
              ŃΗ-
                    -NH2
                  C
                              COPYRIGHT 2005 ACS on STN
L13
    ANSWER 53 OF 65 CAPLUS
AN
     1974:59790 CAPLUS
DN
     80:59790
ΤI
     1,2-Naphthoguinone-2-semicarbazone-NaHSO3 adduct
     Murayama, Masao; Murai, Hiromy; Sempuku, Kenji
PA
     Nippon Shinyaku Co., Ltd.
SO
     Jpn. Kokai Tokkyo Koho, 2 pp.
     CODEN: JKXXAF
DT
     Patent
LΑ
     Japanese
FAN.CNT 1
     PATENT NO.
                         KIŅD
                                 DATE
                                             APPLICATION NO.
                                                                    DATE
                         ---
     JP 48096715
                          /A2
                                 19731210
                                             JP 1972-28775
                                                                    19720322
     JP 51040133
                          B4
                                 19761101
                                             JP 1972-28775
                                                                 A 19720322
GI
     For diagram(s), see printed CA Issue.
AB
     1,2-Naphthoquinoné 2-semicarbazone-sodium bisulfite adduct (I) was prepared
     by treating 1,2-naphthoquinone 2-semicarbazone (II) with NaHSO3. Thus,
     refluxing II 2.1/5 g and NaHSO3 4.16 g in 65% aqueous MeOH 5 hr precipitated
2.4 g I.
     Storing 1 g I with 5% HCl overnight gave 0.45 g II.
IT
     15687-37-3
     RL: PROC (Process)
        (adduct/formation of, with sodium bisulfite)
     15687-37-3 / CAPLUS
RN
CN
     Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
     NAME)
IT
     5/1644-49-6P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
RN
     51644-49-6 CAPLUS
CN
     Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)-, compd. with
     sodium hydrogen sulfite (1:1) (9CI) (CA INDEX NAME)
     CM
     CRN
          15687-37-3
     CMF
          C11 H9 N3 O2
```

## Na

L13 AN

DN

1972/:444955 CAPLUS

77:44955

ANSWER 54 OF 65 CAPLUS L13 COPYRIGHT 2005 ACS on STN AN1974:41515 CAPLUS DN 80:41515 TI2-Acylhydrazone of 1,2-naphthóquinone and its sulfonic acids as organic reagents ΑU Ueda, Takeo; Takada, Atsushi; Kosugi, Kunishige CS Sch. Pharm. Sci., Kitasato Univ., Tokyo, Japan SO Yakugaku Zasshi (1973), 93(11), 1474-80 CODEN: YKKZAJ; ISSN: 0031-6903 DTJournal LА Japanese AB 1,2-Naphthoquinone-2/acylhydrazones and their derivs. having a sulfonic acid group in the 4/position were prepared, and the coloration of these compds. with various metal ions was examined 1,2-Naphthoquinone-2-(pnitrobenzoyl)-hydrazone is a useful reagent for the detection of Hg2+, and bis(1,2-naphthoqvinone-4-sulfonic acid)-2,2-malonyldihydrazone is a useful reagent for the detection and determination of Al3+. ΙT 51055-26-6 RL: PRP (Properties) (metal indicator) 51055-26-6 CAPLUS RN Acetic acid / (1-oxo-2(1H)-naphthalenylidene)hydrazide (9CI) (CA INDEX CN NAME) NHAC

ANSWER 55 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

TI Fourth supplement for the paper-chromatographic separation and identification of phenol derivatives and related compounds of biochemical interest, using a reference system

AU Reio, L.

CS Wenner-Gren Inst., Univ. Stockholm, Stockholm, Swed.

SO Journal of Chromatography (1972), 68(1), 183-205 CODEN: JOCRAM; ISSN: 0021-9673

DT Journal

LA English

Paper chromatog. mobility data in 6 solvent systems are given for a AB further 160 compds. All of the compds. were also checked against 15 standard color reagents and pos. reactions are recorded in 10 tables. The following types of compds. Are covered: phenolic natural products; aliphatic and aromatic aldoximes and ketoximes; benzoic acid derivs.; aliphatic, aromatic, and Meterocyclic amino acid derivs.; pyrimidine and purine derivs.; and alkaloids and drugs used mainly in psychiatry. The paper chromatog. mobility patterns are discussed with reference to earlier results. Interesting similarities in paper chromatog, mobilities were observed for 1,3- and 1,4-monohydroxybenzaldoximes, which showed the typical patterns recorded earlier for 1,3- and 1,4-dihydric phenols. All the bases from the nucleic acids series showed very low mobilities in all solvents, as expected. A small degree of substitution of the bases can alter considerably the characteristis of the mobility patterns and increase the general mobility in all solvents. In particular, N-substituted purines produce mobility patterns that are similar to those recorded earlier for alkaloids in general. DAB reagent (p-dimethyl-aminobenzaldehyde in acetic anhydride) was found to be useful for the detection of aromatic and heterocyclic aldoximes by the production of a pink color.

IT 6373-60-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(chromatog. and identification reactions of, on paper chromatograms)

RN 6373-60-0/ CAPLUS

CN 1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME)

L13 ANSWER 56 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1972:53993 CAPLUS

DN 76:53993

TI Syntheses of 1,2-naphthoquinone-2-semicarbazone and its related compounds, and their reaction with metals

AU Ueda, Takeo; Takada, Atsushi/; Kosugi, Kunishige

CS Sch. Pharm. Sci., Kitasato Úniv., Tokyo, Japan

Yakugaku Zasshi (1971), 91/(11), 1244-9

CODEN: YKKZAJ; ISSN: 0031/6903

DT Journal

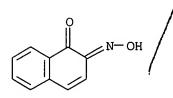
SO

LA Japanese

1,2-Naphthoquinone-2-semicarbazone, 1,2-naphthoquinone-2-thiosemicarbazone, and their derivs. having sulfonic acid group in 4-position, K 1,2-naphthoquinone-4-sulfonate 2-semicarbazone (I) and 2-thiosemicarbazone (II) were prepared The compds. were characterized by their NMR spectra. Color reactions of these compds. with various metal ions were examined II showed specific coloration with Cu in acidic media, and its application as a reagent for spectrophotometric determination of Cu was investigated. Cu, 4-40 µg/2 ml, can be determined with II by measuring the

```
abosrbance at 555 nm.
                            The color reaction is specific for Cu.
IT
     15687-37-3P
     RL: PREP (Preparation)
        (preparation of)
     15687-37-3 CAPLUS
RN
CN
     Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
                    CHN-
L13 ANSWER 57 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
     1970:487678 CAPĻÚS
AN
DN
     73:87678
     1,2-Naphthoquinone semicarbazone (naftazone D.C.I.), a noncoagulant
TI
     hemostatic agent. Identification and physical properties
     Beaudet, Camille; Delrez, Leonie; Duval, Rene
AU
CS
     Centre Rech. / Seresci, Brussels, Belg.
     Cahiers Medicaux Lyonnais (1970), 46(25-26), 2191-2
SO
     CODEN: CMLYAV; ISSN: 0008-0357
DT
     Journal
LA
     French
GI
     For diagram(s), see printed CA Issue.
AB
     Diazotized p-HO3SC6H4NH2 is coupled with 2-C10H7OH, and the product (I) is
     reduced, oxidized, and treated with H2NNHCONH2 to give the title compound
     (II). / Uv and ir data are given.
IT
     15687/-37-3P
     RL: ŚPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
     156/87-37-3 CAPLUS
RN
CN
     Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX
     NAME)
L13 ANSWER 58 OF 65 CAPLUS
                              COPYRIGHT 2005 ACS on STN
     1968:21428 CAPLUS
AN
DN
     68:21428
TI
     O-Cyanocinnamonitriles and related compounds
ΑU
     Elvidge, John A.; Jones, David E. H.
CS
     Univ. Surrey, London, UK
SO
     Journal of the Chemical Society [Section] C: Organic (1967), (20),
     2059-66
     CODEN: JSOOAX; ISSN: 0022-4952
DT
     Journal
LΑ
     English
OS
     CASREACT 68:21428
GI
     For diagram(s), /see printed CA Issue.
```

Ring-scission reactions of 1-nitroso-2- and 2-nitroso-1-naphthol were AB re-examined to obtain satisfactory routes to the o-cyanocinnamonitriles. New observations are made concerning these reactions and the different geometric stabilities of the various o-substituted cinnamic products. A coplanar anti-conformation for the o-substituted cis-cinnamonitriles is indicated by proton magnetic resonance results. In related expts., ring-opening of phthalidylacetic acid and -acetonitrile is effected with base under mild conditions to give, resp., o-carboxy-trans-cinnamic acid (I) and a mixture of  $\phi$ -carboxy-cis- and -trans-cinnamonitriles, from which the cis-product is readily separated The reason for these findings is discussed. 18 references. IT 6373-60-0 RL: RCT (Reactant); RACT (Reactant or reagent) (ring cleavagé of) RN 6373-60-0 CAPLÚS CN 1,2-Naphthalenédione, 2-oxime (9CI) (CA INDEX NAME) ANSWER 59 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN AN1963:431667 CAPLUS DN 59:31667 OREF 59:5711c-d A new greenhouse technique for evaluating fungicides for control of cotton sore-shin ΑU Elsaid, Hany M.; Sinclair, J./B. CS Louisiana State Univ., Baton/Rouge Plant Disease Reporter (1962), 46, 852-6 CODEN: PLDRA4; ISSN: 0032-0811 DTJournal Unavailable A new technique which simulates field conditions by placing infested soil on the edge of treated/soil was found effective in screening 18 soil fungicides in both steamsterilized and nonsterilized soil. Pentachloronitrobenzene gave the most desirable results, followed by tributyltin chloride of abietylamine ethylene oxide (Tin-San). 6373-60-0, 1,2-Naphthoquinone, 2-oxime IT(Cu derivative, /Rhizoctonia solani control in cotton by) RN 6373-60-0 CAPLUS 1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME) CN



L13 ANSWER 60 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN AN 1960:133047 CAPLUS DN 54:133047 CAPLUS COPYRIGHT 2005 ACS ON STN AN 1960:133047 CAPLUS DN 54:25489i,25490a-b Antiozonants to protect plants from ozone damage AU Rich, Saul; Taylor, Gordon S.

```
Connecticut Agr. Expt. Sta., New Haven
CS
SO
     Science (Washington, DC, United States) (1960), 132, 150-1
     CODEN: SCIEAS; ISSN: 0036-807/5
DT
     Journal
LΑ
     Unavailable
AB
     Strips of shade tent cloth treated with various antiozonants were tested
     in an O3 gassing chamber/to determine their effect in reducing the O3 level and
     holding it down. Mn(ous') 1,2-naphthoquinone-2-oxime and Mn(ous) and
     Co(ous) 8-quinolinolates were effective. Shade tent cloth treated with
     Co(ous) 8-quinolinolare effectively protected young tomato plants from
     damaging levels of 03. Antiozonants used in the rubber industry, Ni
     dibutyldithiocarbamate, N-isopropyl-N'-phenyl-p-phenylenediamine, and
     N,N'-di-sec-octyl-p-phenylenediamine, were found to be much more effective
     antiozonants than/Zn ethylenebis(dithiocarbamate), which is currently used
     in agriculture to protect plants from atmospheric 03.
     6373-60-0, 1,2-Naphthoquinone, 2-oxime
        (Mn(II) derivs., as antiozonant for plants)
RN
     6373-60-0 CAPLUS
     1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME)
CN
L13 ANSWER 61 OF 65 CAPLUS
                              COPYRIGHT 2005 ACS on STN
AN
     1960:99313 CAPLUS
DN
     54:99313
OREF 54:18862c
     1,2-Naphthoguinone oximés as fungicides
     Lamb, Glentworth; Clapp, James W.
PA
     American Cyanamid Co.
DT
     Patent
T.A
     Unavailable
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
ΡI
     US 2935443
                                19600000
                                            US
     GB 913196
                                            GB
AB
     Heavy-metal complexes of I are used.
IT
     6373-60-0, 1,2-Naphthoquinone, 2-oxime
        (and its metal complexes, as fungicides)
RN
     6373-60-0 CAPLUS
CN
     1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME)
L13
    ANSWER 62 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     1960:99312 CAPLUS
DN
     54:99312
OREF 54:18862c
     1,2-Naphthoquinone oximes as fungicides
```

```
Lamb, Glentworth; Clapp, Jámes W.
IN
PA
     American Cyanamid Co.
DT
     Patent
T.A
     Unavailable
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                  DATE
PΙ
     US 2935442
                                19600000
                                            US
     GB 913196
                                            GB
     Heavy metal complexes/are used, e.g. Cu, Zn, Mn, Ni, Co, Fe, Cr, Cd, Sn,
AΒ
     Hg, Ag, and Pb complexes of a 1,2-naphthoquinone 2-oxime.
IT
     6373-60-0, 1,2-Napht/hoquinone, 2-oxime
        (and its metal complexes, as fungicides)
RN
     6373-60-0 CAPLUS
CN
     1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME)
           HO -M
L13 ANSWER 63 OF 65 CAPLUS
                              COPYRIGHT 2005 ACS on STN
AN
     1960:99310 CAPLUS
DN
     54:99310
OREF 54:18862a-c
TI
     1,2-Naphthoquinone oximes as fungicides
IN
     Lamb, Glentworth; Clapp, James W.
PΑ
     American Cyanamid Co.
DT
     Patent
LΑ
     Unavailable
FAN.CNT 1
     PATENT NO.
                        KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE ·
     US 2935440
PΙ
                                19600503
                                            US
     GB 913196
                                            GB
AΒ
     Seeds, plants, and fruits are protected against fungus infections by the
     use of an aqueous emulsion or dust containing a 1,2-naphthoquinone 1-oxime (I)
or
     its alkali meta! salt. The I is prepared by treating 2-naphthol or
     substituted 2-naphthol with HNO2. The alkali metal salts are prepared by
     mixing an aqueous solution of the metal hydroxide with a concentrated alc.
solution of I.
     The effectiveness is described of 3-bromo-, 6-bromo-, 7-methoxy-,
     3-chloro-, and 3,6-dibromo-1,2-naphthoquinone 1-oxime against spores of
     Sclerotinia fructigena, Stemphylium sarcinaeforme, and Colletotrichum
     lagenarium.
IT
     6373-60-0, 1,2-Naphthoquinone, 2-oxime
        (and its metal complexes, as fungicides)
RN
     6373-60-0 CAPLUS
CN
     1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME)
```

L13 ANSWER 64 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN AN 1960:82836 CAPLUS DN 54:82836 OREF 54:15811h-i,15812a TIAir-conditioned tobacco ΑU Rich, Saul; Taylor, Gordon S Connecticut Agr. Expt. Sta/, New Haven Frontiers of Plant Science (1960), 12(No. 2), 5 CS SO CODEN: FOPSAC; ISSN: 0016-2167 DT Journal LA Unavailable AB Plants sprayed with Zn' and Mn(II) naphthoquinone-2-oxime were little damaged during a period of high O3 concentration in the atmospheric The 2 compds. were found to be antiozonants. Applications of Co(II) 8-quinolinolate (I)protected growing tobacco against "weather fleck" produced by O3. I did not need to be applied to the tobacco plants. In expts. in a gassing chamber,  $\Lambda$  protected the plants if applied to the gauze nets or tents customarily used over tobacco growing in the field. Protection against 0.8 p.p/m. O3 for 4.5 hrs. was provided by I-treated nets. Unprotected tobacco plants suffered considerable damage. 6373-60-0, 1,2-Naphthoquinone, 2-oxime IT (Mn(II) and Zn derivs., as antiozonants for plants) RN 6373-60-0 **CAPLUS** 1,2-Naphtha/lenedione, 2-oxime (9CI) (CA INDEX NAME) OH L13 ANSWER 65 OF 65 CAPLUS COPYRIGHT 2005 ACS on STN 1923:6831 CAPLUS ΑN 17:6831 DN OREF 17:1218c-h TIBeckmann rearrangement in o-and p-quinone oximes Beckmann, Ernst; Liesche, Otto ΑU SO Ber. (1923), 56B, 1-23/ DТ Journal LΑ Unavailable GΙ For diagram(s), see printed CA Issue. AB Because of the growing importance of the Beckmann rearrangement for the determination of the constitution of organic compds., it is desirable to know the behavior of o- and p-quinone oximes. The rearrangement of β-naphthoquinone óxime, whether by means of AcOH-Ac2O-HCl, PhSO2Cl in C5H5N or by the action of PCl5, gives in each case the substance C10H7O2N, m. 179°; this is a mono-basic acid, of which the Ag, Na, K and Ba salts were prepared Saponified with NaOH, it yields cinnamic-o-carboxylic acid (Ber. 10, 2203). The action of NH3 upon the intermediate chloride gives a compound C10H80N2, m. 207°. Under the above conditions of rearrangement the dioxime yields an anhydride (Ber. 17, 215). Ac20 and HCl in AcOH, reacting with the  $\alpha\text{-monoxime},$  gave a compound, C12H9O3NCl2, containing an Ac group, m. 165°. PhSO2Cl in C5H5N gave a benzenesulforic ester, felt-like needles, m. 183-4°. Accl gave no definite product, while Ac20 and AcOH gave an acetate, brown, glistening needles, m.  $h32.5^{\circ}$ . The  $\alpha$ -dioxime gave a N-diacetate (Ber. 21, 428). p-HOC6H4NO and PhSO2Cl, allowed to stand 12 hrs. and then

warmed 20 min., gave the compound CH:CH.O.CH:CH.CO.NH, yellowish brown needles, m. 224°. The alkaline solution gives a series of characteristic ppts. with metallic salts. Benzoate, leaflets, m. 189-90°. p-C6H4(:NOH)2 and PhSO2Cl gave only the corresponding ester, m. 175-8°. The other agents gave Cl-containing products or smears. The rearrangement product of anthraqui-none monoxime (Ber. 27, 2125) yields 2'-aminadiphenyl ketone-2-carboxylic acid upon solution in alkali and precipitation

with acid, m. 199° with formation of the rearrangement product. Silver salt, fine needles. Methyl ester, m. 168-73°; this was diazotized and coupled with Me2NPh, giving a green dye with metallic luster and easily sublimed. Anthraquinone oxime phosphate by the action of H2O upon the reaction product of the oxime, POCl3 and PCl5, analyzed as the silver salt. Benzenesulfonic ester, fine needles, m. 154°. The rearrangement product gave an oxime, C14H10O2N2, rectangular plates from EtOH, needles from AcOH, decompose 243°. Benzoate, m. 209°. Rearrangement of the new oxime gave Anderlini's phthalyl-o-phenylenediamine (Gazz. chim. ital. 24, I, 145), which is unstable and gives 2-phenylbenzimidazole-22-carboxylic acid.

IT **6373-60-0**, 1,2-Naphthoquinone, 2-oxime

(rearrangement of)

RN 6373-60-0 CAPLUS

1,2-Naphthalenedione, 2-oxime (9CI) (CA INDEX NAME)

CN

```
(FILE 'HOME' ENTERED AT 08:13:28 ON 25 AUG 2005)
```

```
FILE 'REGISTRY' ENTERED AT 08:13:38 ON 25 AUG 2005
L1
                STRUCTURE UPLOADED
L2
                STRUCTURE UPLOADED
L3
            101 S L1 FULL
L4
              3 S'L2 FULL
     FILE 'CAPLUS' ENTERED AT 08:15:17 ON 25 AUG 2005
L5
           198 S L3
L6
              2 S L4
L7
              2 S L5 AND GLUTAMATE
L8
              0 S L5 AND VASOPROTECTIVE
L9
              0 S L5 AND VASO
L10
             11 S L5 AND BLOOD
     FILE 'REGISTRY' ENTERED AT 08:18:46 ON 25 AUG 2005
L11
                STRUCTURE UPLOADED
L12
             12 S L11 FULL
     FILE 'CAPLUS' ENTERED AT 08:20:05 ON 25 AUG 2005
L13
             65 S L12 OR L4
=> s 113 and glutamate
         97069 GLUTAMATE
          1086 GLUTAMATES
         97459 GLUTAMATE
                 (GLUTAMATE OR GLUTAMATES)
L14
             2 L13 AND GLUTAMATE
=> d fbib abs hitstr 1-2 114
     ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
     2001:63831 CAPLUS
AN
DN
     134:125960
ΤI
     Use of \beta-naphthoguinone derivatives for making medicines having an
     inhibiting effect on the release of glutamate by the brain
     Israel, Maurice; Molgo, Jordi; Bloy, Christian; Mattei, Cesar
IN
     Centre National de la Recherche Scientiffique (C.N.R.S.), Fr.
PA
     PCT Int. Appl., 22 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     French
FAN.CNT 1
     PATENT NO.
                         KIND
                                 DATE
                                            APPLICATION NO.
                                                                     DATE
                         ----
                                                                     _____
     WO 2001005404
PI
                          Α1
                                 20010125
                                             WO 2000-FR2120
                                                                     20000721
         W: JP, US
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
                                             FR 1999-9469
                                                                  A 19990721
     FR 2796552
                          A1
                                 20010126
                                             FR 1999-9469
                                                                     19990721
     EP 1196176
                          A1
                                 20020417
                                             EP 2000-958596
                                                                     20000721
     EP 1196176
                          B1
                                 20040204
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
                                             FR 1999-9469
                                                                  A 19990721
                                             WO 2000-FR2120
                                                                  W 20000721
     JP 2003504405
                         · T2
                                 20030204
                                             JP 2001-510459
                                                                     20000721
                                             FR 1999-9469
                                                                 Α
                                                                    19990721
                                             WO 2000-FR2120
                                                                 W 20000721
     AT 268599
                          Ε
                                 20040615
                                             AT 2000-958596
                                                                     20000721
                                             FR 1999-9469
                                                                 A 19990721
```

					H 20000721
	PT 1196176	Т	20040831	WO 2000-FR2120 PT 2000-958596	W 20000721 20000721
	ES 2215716	Т3	20041016	FR 1999-9469 ES 2000-958596	A 19990721 <sup>,</sup> 20000721
	US 2002115617	A1	20020822	FR, 1999-9469 US 2002-51243	A 19990721 20020122
	03 2002113017	AI	20020622	,fR 1999-9469	A 19990721
	CA 2368850	AA	20030722 /	/WO 2000-FR2120 CA 2002-2368850	A2 20000721 20020122
GI				FR 1999-9469	A 19990721
		OH	, /		
	•		OH.		
			HO		
		]%-	$\dashv$		
_	O NR	ΛÎ	CO <sub>2</sub> H		
	INK (		== NR		
	I 🗸		II	•	
AB	β-Naphthoquinone der	ivs. a	re provided	for making medicine	es with an
	inhibiting effect or derivs. corresponding	i the r ig to I	release of <b>g</b> : : (R = NHCON	<b>lutamate</b> by the brai H2, NHCOCH3, OH) and	in, the Iglucuronide
	derivs. II and their invention is applica				lition salts. The
ΙT	6373-60-0 15687-37-3 250585-74-1/321546-4	51055	-26-6		•
	RL: BAC (Biological	activi	ty or effect		
	study, unclassified) (Uses)	; THU	(Therapeution	c use); BIOL (Biolog	gical study); USES
	(β-naphthoquinone glutamate in brai		s. for inhil	biting release of	
RN CN	6373-60-0 CAPLUS 1,2-Naphthalenedione	٠	· · · · · · · · · · · · · · · · · · ·	/CA TAIDEY NAME)	
CIV	1,2-Naphenareneurone	:, 2-0x	Time (9CI)	(CA INDEX NAME)	
	0				
	Ŭ √n—OH				
				·	
RN	15687-37-3 CAPLUS				
CN	Hydrazinecarboxamide	2-(1	oxo-2 (1H) -1	naphthalenylidene)-	(9CI) (CA INDEX
	N-NH-C-NH2				

CN Acetic acid, (1-oxo-2(1H)-naphthalenylidene)hydrazide (9CI) (CA INDEX NAME)

RN 250585-74-1 CAPLUS

CN  $\beta$ -D-Glucopyranosiduronic acid, 2-/(aminocarbonyl)hydrazono]-1,2-dihydro-1-naphthalenyl (9CI) (ÇA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 321546-47-8 CAPLUS

CN β-D-Glucopyranosiduronic acid, 2-(acetylhydrazono)-1,2-dihydro-1-naphthalenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 321546-48-9 CAPLUS

CN β-D-Glucopyranosiduronic acid, 1,2-dihydro-2-(hydroxyimino)-1-naphthalenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RE.CNT THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

1999:520285 CAPLUS AN

DN 131:346372

TΙ Naftazone reduces glutamate cerebrospinal fluid levels in rats and glutamate release from mouse cerebellum synaptosomes

ΑU Mattei, C.; Molgo, J.; Joseph, X.; Israe, M.; Bloy, C.

Institute of Medical Sciences, Department of Biomedical Sciences, CS University of Aberdeen, Aberdeen, UK

SO Neuroscience Letters (1999), 271(3), 183-186 CODEN: NELED5; ISSN: 0304-3940

Elsevier Science Ireland Ltd.

PB DTJournal

LΑ English Cited weady

AΒ It is well known that an excessive release of glutamate in the mammalian brain plays a major role in several neurol. diseases. Naftazone (Etioven®) is a currently used vasoprotectant drug that is metabolized in humans by reduction and glucuronidation. In the present study naftazone was found to decrease glutamate levels in the cerebrospinal fluid (CSF) of rats treated for 15 days, as determined by a chemiluminescent glutamate assay reaction. Naftazone and its glucuronide derivative also reduced resp. spontaneous and high K+-evoked glutamate release from mouse cerebellum synaptosomes. It is likely that naftazone and its glucuronide metabolite contribute in vivo to decrease glutamate levels in the CSF through their inhibitory actions on glutamate release.

IT 15687-37-3, Naftazone 250585-74-1

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(naftazone reduces glutamate cerebrospinal fluid levels in rats and glutamate release from mouse cerebellum symaptosomes)

RN 15687-37-3 CAPLUS

CN Hydrazinecarboxamide, 2-(1-oxo-2(1H)-naphthalenylidene)- (9CI) (CA INDEX NAME)

RN 250585-74-1 CAPLUS

CN β-D-Glucopyranosiduronic acid, 2-[(aminocarbonyl)hydrazono]-1,2-dihydro-1-naphthalenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT